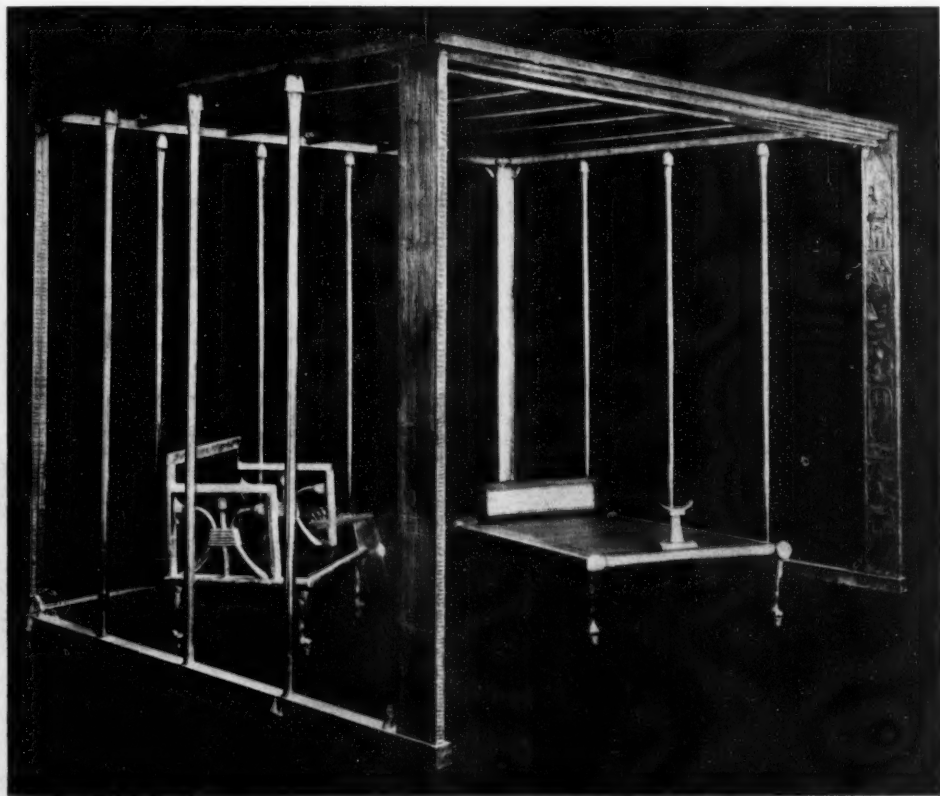


ART AND ARCHAEOLOGY

OL. XXXIII, No. 6

NOVEMBER-DECEMBER, 1932



Courtesy of the Museum of Fine Arts, Boston.

THE GOLD-CASED BED CANOPY OF QUEEN HETEPHERES I, MOTHER OF CHEOPS, CONTAINING HER ARM-CHAIR, JEWEL-BOX, AND BED WITH HEADREST.

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NUMBER 6

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MINTURNÆ: A VIEW OF THE TEMPLE AREA, FROM THE TOP OF THE THEATER.

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ART *and* ARCHAEOLOGY

The Arts Throughout the Ages

VOLUME XXXIII

NOVEMBER-DECEMBER, 1932

NUMBER 6

THE EXCAVATION OF MINTURNÆ

By JOTHAM JOHNSON

The article and photographs which follow are presented through the courtesy of the University Museum of Philadelphia. Dr. Johnson went to Italy as head of the expedition in July of 1931, and promised the editor of ART AND ARCHAEOLOGY at that time to prepare a non-technical account of his work at the close of the first campaign. Dr. Johnson returned to the United States in July of this year. ART AND ARCHAEOLOGY is fortunate in being thus able to present the results of this important excavation so quickly, and extends its thanks to both the University Museum and Dr. Johnson.

IN the spring of 1931 Count David Costantini, as President of the International Mediterranean Research Association, invited the University Museum to excavate in Italy under the auspices of the Association. Thanks largely to the generosity of Gustav Oberlaender, funds for such an undertaking were secured. It was planned at first to dig at Stabia, the third Vesuvian city, but when the matter was discussed on the spot with Count Costantini and Dr. Maiuri, Superintendent of Antiquities for the Province of Campania, it became apparent that Minturnæ offered many practical advantages over Stabia, and excavations were accordingly inaugurated there, on August 10 of last year.

On the site of Minturnæ several of the ancient buildings could be identified and to some degree studied before the work of excavation was begun. Of these the aqueduct is probably the most famous. It was the object of considerable attention in an article

by Howard Crosby Butler in the *American Journal of Archaeology* for 1901. The aqueduct ended at a gate of the city, through which once passed the Appian Way. This gate had been excavated by a local landholder incompletely, but sufficiently, to date its construction, and with it a period of the city's expansion, to the middle of the first century B. C.—evidence in itself almost adequate to confirm Frontinus' statement regarding a Caesarean colony. Near the gate stands a low, oval hill long since recognized as the amphitheater. A quarter-mile to the east, near the bank of the Liris, the theater rises from a low mound of debris, and near it could be traced building foundations, overgrown with brush and weeds in the middle of fields otherwise under intense cultivation. At the river-bank could be seen remains of several ancient bridges, and long rows of shipways; and finally, a mile downstream and near the river mouth, is the Temple of Mari-

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ca, excavated a few years ago by Dr. Maiuri.

In 88 B. C. Sulla was ordered to yield the command of the army to Marius. His reply was to march on Rome, and Marius, unable effectively to meet him, was forced to flee. Setting sail from Ostia, bad weather forced him and his companions ashore near Circe's Island, where they spent a forlorn night. Wandering aimlessly by the coast next day, they were set upon by a troop of horse. By chance two boats were sailing by, and the fugitives succeeded in swimming out to them. The horsemen called to the sailors of the ship which Marius had reached to give him up, but—after some hesitation—they refused and sailed off with him. Marius' companions, in the other boat, landed safely at Aenaria, a nearby island.

When the ship carrying Marius reached the mouth of the Liris, just below Minturnae, the rising wind made it advisable to seek shelter in the channel, but as soon as Marius had gone on shore the sailors shoved off

again and sailed away. Marius, now desperate, sought sanctuary with an old man who worked in the marshes. The man concealed him in a cave by the water's edge; but when the noise of the pursuit came near, Marius, afraid that the old man would expose him, stripped off his clothes and plunged into the river in the hope of greater safety among the reeds. But he was found.

His captors hauled him out, naked and covered with mud, and conducted him to Minturnae for execution; for Sulla had sent orders through all these towns that he should be searched for rigorously, and put to death wherever found. The magistrates of Minturnae, unwilling to act hastily, sent him under guard to the house of a woman of the town, while they deliberated. After Marius had retired for the night, they sent a soldier to kill him, but, according to the historian, the man was terrified by Marius' glowing eyes, and by his solemn voice saying "Do you dare kill Marius?" At this the assassin,



ONE OF THE TEMPLES BEFORE THE START OF WORK AT MINTURNÆ.



THE SNOW-COVERED AURUNCIAN MOUNTAINS FROM THE EXCAVATIONS AT MINTURNÆ.

dropping his sword, fled to the magistrates, who found themselves thoroughly shamed. Reconsidering the matter, they decided that the courageous part was to contribute to Marius' relief, and escorted him to the seashore again. But even here they met with delay, for in their path lay the sacred grove of Marica, from which nothing which had ever entered it might be removed. Consequently, Marius' baggage might not pass through and the way around was long and tedious. However, an old man of the group declared that no grove was sacred enough to hold back Marius; taking the risk on his own head, he picked up some of the luggage and marched calmly through the sanctuary. The others promptly followed. Reaching the shore, Marius found a boat ready, and in it he escaped to join his friends at Aenaria, whence they traveled to Africa. Plutarch further tells that Marius afterwards gave a

painting of the scene to the Temple of Marica.

Shorter but more important classical references to Minturnæ are provided by Livy, who tells us that in 314 B. C. the three chief cities of the Aurunci, Ausona, Minturnæ and Vescia, repudiated Rome's influence over them, and had to be taken by storm. Minturnæ seems to have returned readily to the fold, for two years later the Appian Way was peacefully surveyed through the city, while Ausona and Vescia disappeared so completely that not even their sites are certain. The next reference in Livy is to a Roman colony, for which enlistments were taken in 296 B. C. According to Velleius Paterculus, however, the colony at Minturnæ was formed in 295 B. C., "in the consulate of Quintus Fabius for the fifth time and that of Decius Mus for the fourth time". Perhaps both these statements are correct, for Livy

ART AND ARCHAEOLOGY

goes on to tell us that due to the known inhospitality of the region names came slowly to the list; and it is likely that the actual foundation was delayed past the new year.

From Frontinus we learn that a second colony was sent to Minturnae by Caesar. Hyginus Gromaticus, with whose manuscript is a priceless sketch of the city, says that a colony was established there by Augustus. It has been suggested that both authors refer to the same colony, but it is hardly to be doubted that a colony was established by

of Suessa Aurunca and the same mountain pass that the modern Via Appia follows.

Altogether, considerable information about Minturnae was to be had without recourse to the shovel. In the opinion of several colleagues with whom the prospect of excavating the city was discussed, further information, whether on Minturnae or on Roman archaeology and history, was superfluous, in view of the undoubtedly tremendous mass of Roman material already available. No Italian site would prove as absolutely in-



MOVING A STATUE-BASE IN THE EXCAVATIONS AT MINTURNAE.

Caesar and there is good reason to accept that of Augustus also, though more convincing proof will be sought in a future campaign.

There are other useful passages in the ancient authors. Pliny and Strabo agree that Minturnae stood on both sides of the Liris. Cato speaks favorably of the iron to be purchased there. The Peutinger Table shows the Appian Way running past Formia through Minturnae to Sinuessa and the south, while another road, starting at Minturnae, leads to Teano, presumably by way

structive as a corresponding site of Greece, Asia Minor, Syria, etc. Furthermore, in 1819 Minturnae had been excavated, apparently with great thoroughness, by Nugent, an Austrian general in the service of the Bourbon Kingdom of Naples. The large number of statues and architectural fragments carried off by Nugent, and now in the museum of Zagreb (Yugoslavia), would indicate that little more awaited the excavator's spade in Minturnae. Why, then, dig there?

From the vantage-point of eleven months

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GENERAL VIEW OF THE REPUBLICAN FORUM FROM THE APPIAN WAY. IN THE BACKGROUND STANDS THE THEATER.



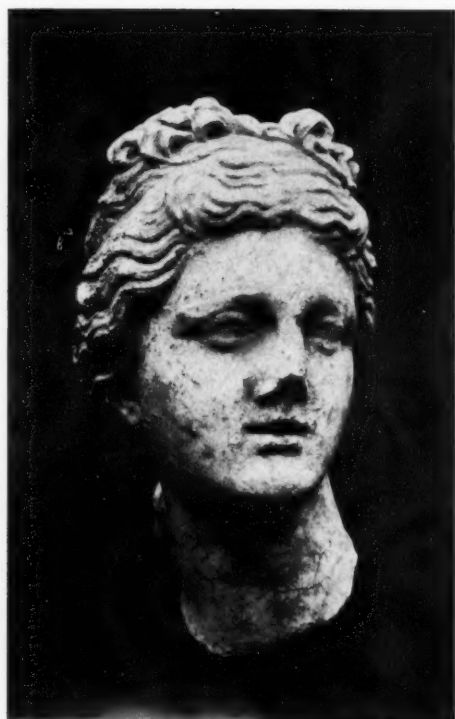
TWO PERIODS OF CITY WALLS; TO THE LEFT IS A POLYGONAL TOWER, AND IN THE FOREGROUND THE WALL OF THE ROMAN COLONY OF 296 B. C.

of work at the site, we can take vigorous exception to these observations. Deferring momentarily the question of finds in favor of the monuments, we must realize that, in the light of the new discoveries at Minturnae, we have much to learn about early Rome. The Eternal City can tell us relatively little about Roman ideas in city-planning; first, because in spite of the extensive and remarkably fruitful modern excavations in some parts of the city, relatively little of the whole will appear in this century; and second, because the heart of the city and the trail which led into it—to condition the city's growth for ever after—were crystallized at a period earlier than the concept of organized topography. It is true that thanks to Dr. Calza's masterly work at Ostia we can follow *in toto* the principal elements of an early colony;

cardo and *decumanus* dividing the rectangular space within the fortifications into four regular blocks, and internal and external pomerial streets. But the colonists of Ostia found no previous village on the site, and so Ostia tells us nothing of the organization of colonies sent to towns already flourishing—a more important group, for Ostia is almost unique in this respect. Was a separate city unit built, or did the colonists settle within the old walls (an unlikely theory, because the city walls would probably enclose an area already too small for the local needs)? Or was the earlier town enlarged to form a *Dipolis*? And in any case, was the basic plan modified for this special circumstance? Again, except for the walls and streets, Ostia reveals neither public constructions nor private houses. What sort of public buildings

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ART AND ARCHAEOLOGY



HEAD OF VENUS FOUND AT MINTURNAE

did Romans build in the IIIrd century B. C., and what architectural school did they follow? Further, some colonies seem to have been purely military; the number of colonists is sometimes cited as 300, clearly allowing only for soldiers. But when the number is 4,000 or 6,000, the families of the soldiers must have accompanied them, as well as numerous artisans. To distinguish between these two economic situations is another work that remains to be done.

In other words, few ancient towns in Italy have been extensively excavated. Ostia, Marzabotto and Pompeii, and portions of Rome, are indeed consolidated enough to be intensely instructive, and much may be expected of Ardea and other sites, but each type of city forms a separate field. One thoroughly excavated city will tell a story that a score of

fortifications and a hundred isolated temples cannot rival, but nowhere yet can we read on the ground the story of Republican Rome.

The fault for this lies not with the archaeologists of Italy, but with circumstances of geography. The reasons which first dictated the choice of town sites—almost invariably on narrow hilltops—were principally malaria and the danger of hostile raids. These same conditions dictated the location of the medieval successors of Roman cities, to such an extent that with rare exceptions every ancient acropolis is occupied by a modern town, and for financial reasons is inaccessible to the spade.

But one of the exceptions is Minturnae. The ancient city stands upon a low mound in a flat malarial plain by the sea. The inhabitants who stayed on after the Longobard invasion of 590 A. D. abandoned it forever in favor of the nearest hill when the Saracen



REPUBLICAN INSCRIPTIONS FROM THE BASE COURSE OF A TEMPLE AT MINTURNAE.

ART AND ARCHAEOLOGY

raids of 883-916 made existence in the plain too precarious. Of modern constructions on the site there are only a few rooms under the arcades of the theater—and which in supporting the vaults have preserved the only traces of the external superstructure—and a large post-house, built at the end of the eighteenth century. The latter with modest

scription, reused. Just at quitting-time the paving of the Appian Way was reached—though it was many weeks before its identification as the Appian Way could be regarded as certain. The temple was eventually shown to belong to the period of Tiberius; in its base course were not one but twenty-nine inscriptions relating to *magistri* and *magistrae*



THE STREET LEADING TO THE EAST ENTRANCE OF THE THEATER, WHICH COULD BE CLOSED TO TRAFFIC DURING PERFORMANCES. CIPPI AND ARCHITECTURAL FRAGMENTS CAN BE SEEN.

alterations will fill the need for storerooms and offices when the present headquarters in the theater are torn out, and later will become the Minturnae Museum.

Work was begun on the south front of a rectangular temple *podium* in front of the scene-building of the theater, at which point the cement core of the foundation showed traces of an original flight of steps. Late in the afternoon of the first day the ground course was reached; the first stone to come to light bore a twelve-line Republican in-

of four cults of the II^d and Ist centuries B. C. Their successive discoveries more than cover the entire campaign, as the last six were only found some days after the work had stopped, when at Dr. Rostovtzeff's instigation we examined the under surfaces of the stones.

Immediately to the west of this temple lay the foundations of an Italiote temple of the III^d century B. C. When the excavation of this *insula* was completed, the temples proved to be in the middle of the open area enclosed by the three wings of a large *stoa* whose

ART AND ARCHAEOLOGY

façades gave on the Appian Way. In several reconstructions it had survived until the late period of the city, but its first building was shown to belong to the arriving Roman colony of 295 B. C. Thus the first campaign has completely cleared the Republican Forum of the city, consisting originally of the *stoa* and a temple, and a larger free area.

Trenches in the corresponding *insula*

To the east of the fora, opposite each other on the Appian Way and so corresponding with the fora themselves, are two temple sanctuaries. It was possible to excavate one of these almost entirely. It consisted of a high *enceinte* wall about the whole area, a three-winged colonnade, and, in the middle, the temple. The first period of this complex goes back to approximately the time of



RESTORED ANTEFIXES OF UNUSUAL TYPES.

across the Appian Way proved that there lay the Imperial Forum. At several points the ancient paving is only a few inches below the modern level, and except for the east side, which was occupied by a long single colonnade, systematic excavation in the Imperial Forum was deferred until a later season. One promising aspect of future work in this *insula* was provided by a hole sunk in the floor of the colonnade, which revealed foundations of private houses, almost certainly belonging to the first colony, and sealed in by the solid floors of later constructions.

Caesar. The sanctuary opposite could not be undertaken during this campaign, but its wall can be followed in its entire length on the surface of the ground. It seems likely that in this *enceinte* the temple was built at the extreme rear of the enclosure rather than in the center.

Further to the east lay the low acropolis of the Auruncian city of Minturnae. By good fortune a minimum number of trial trenches disclosed a portion of each of the four walls, establishing its entire perimeter. It belongs to a period of polygonal construc-

ART AND ARCHAEOLOGY



HEAD OF DIONYSUS(?) FROM A DOUBLE HERM.

tion which in spite of the accumulated studies of many scholars cannot yet be dated satisfactorily; it is tentatively assigned to the early fifth century. This city was enlarged by the addition of another rectangular area to the west, whose wall of *opus quadratum* could confidently be assigned to about 300 B. C. and so must belong to the Roman colony of 295. Within this area lie the *insula* of the Republican Forum and the *insula* of private houses which later became the Imperial Forum. It was not possible to follow the limits of the colony wall, but this is the first task reserved for the new campaign.

The theater, as we have seen, lies immediately to the north of the Republican Forum. Of this only the east parodos was cleared, as its extent will necessitate an entire season of steady work. Some of the lowest seats were found to be *in situ*, and although many architectural fragments have vanished, it is likely that enough remain for a valuable paper re-

construction. The theater construction is so identical with that of the aqueduct—which Butler showed to belong to the closing years of Augustus' reign or the initial years of Tiberius—that they must be exactly contemporary.

As for the finds, their number and interest are remarkable in view of a fact which is now undoubted: that the Republican Forum, the center of our most concentrated efforts during this first campaign, was the scene of Nugent's excavation in 1819. Only inconsequential fragments of marble sculpture, and relatively few architectural elements, were found in the entire block. Elsewhere Minturnae is surprisingly untouched. In the



DEDICATION TO FURIA SABINIA TRANQUILLINA, WIFE OF GORDIAN III



ROMAN JUGS FROM CHRISTIAN TOMBS IN THE THEATER.



RESTORED ANTEFIXES OF THE "PERSIAN ARTEMIS" OR "MISTRESS OF THE ANIMALS" TYPE, OF SPECIAL INTEREST BECAUSE THEY ARE PROBABLY THE LATEST KNOWN APPEARANCE OF THE MOTIF.

excavated temple *ençinte* a score of good pieces were found, largely within a metre of the surface, and two places proved deliberate ancient repositories of sculpture in marble: a deep water-channel which ran beside the Appian Way, and a vault which formed a temple substructure. Among these were portraits of Tiberius, Domitian and perhaps Germanicus, a number of excellent private portraits and two Venuses. An original Greek work was found, signed by Kallimachos and Gorgias of Athens; only a leg and tree-trunk were preserved, but there is hope of locating the other fragments.

Not only in marble sculpture were finds abundant: a large deposit of fragments of terracotta statues from a destroyed shrine was uncovered beside one temple; in a trial trench in the Imperial Forum were discovered the wasters from an important potter's shop of the third century B. C.; and we have al-

ready spoken of the Republican inscriptions from the temple.

Perhaps the most satisfactory feature of Minturnae is the simplicity of the program. Thanks to the collective advice and encouragement of Dr. Maiuri, Dr. Bœthius of the Swedish Institute in Rome, and Dr. Richmond of the British School, the first campaign has brought to light a considerable portion of the first Roman colony at Minturnae, made its delimitation a matter of relatively short time, and traced the outline of the pre-Roman city. For the future it is not a question of searching for oases in a desert, but of selecting the most important centers in a long series of undeniably fertile spots. And when we approach the oldest city we may expect new enlightenment; for the Aurunci or Ausones had a past so heroic that long generations of Greeks knew Italy by no other name than Ausonia.





THE OVERSE AND REVERSE OF THE KISH TABLET.

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THE SUMERIAN EDITION OF THE EPIC OF GILGAMISH

By STEPHEN LANGDON

Some months ago, following press reports of new and important discoveries bearing upon the Sumerian version of the Epic of Gilgamesh, ART AND ARCHAEOLOGY wrote to the Field Museum of Natural History in Chicago. The discoveries had been made by a field expedition sponsored by the Field Museum and Oxford University, and analyzed by the noted British scholar, Professor Stephen Langdon. In accordance with the editor's request Dr. Langdon was approached, and the brief article which follows gives for the first time in popular form the story telling how the Sumerian Noah obtained immortal life and why snakes never grow old.

AT the request of the editor I have written the following resume of the Sumerian Epic of Gilgamesh, which proves that the original of the Babylonian and Assyrian Epic existed in an edition of five or six books or tablets. Last season M. Watelin, while exposing the eastern end of the huge planoconvex brick platform of the double temple of Ninlil and Enlil at Hursagkalamma (Eastern Kish), recovered a group of Sumerian literary tablets. Among them was a two-column tablet, originally ten inches long. The tablet has been broken across the middle so that only the lower half remains, but it is hoped that the lost part may be found in subsequent excavation and perhaps also the other tablets of the Epic. The entire tablet carried about 200 lines and is probably tablet or Book Two of the two-column Sumerian edition. One photograph shows the obverse of the Kish tablet and the other the reverse.

This tablet belongs to that part of the Epic in which the expedition of Gilgamesh and his companion Enkidu against the monster Huwawa of the Lebanon mountains was described. There is a more vivid and detailed description of Huwawa (as the name is written here) or Humbaba than in any of the later versions. From the text in which Gilgamesh declares,

"As long as this man exterminates men,
yea exterminates them,
Surely my foot in the city will I not
set again,"

it seems that Huwawa was in reality an his-

torical person, a dreaded foe of the ancient Sumerian dynasty of Erech in the time of its kings Lugalbanda, Dumuzi and Gilgamesh, circa 3500 B. C. This text states that Gilgamesh was the son of Lugalbanda, and Dumuzi or Tammuz is known to have been the brother of Gilgamesh.

Huwawa is here described in the following lines of an address of Enkidu to Gilgamesh:

"His servant Enkidu cried out to him,
'My lord thou art. This man before
me has enraged my heart.
He is a hero that slaughters, with the
voice of the monster Ushumgal.
His face is the face of a lion.
His breast is a hurricane of onslaught.
His front is flame, the mouth of 'a
dragon']'."

This new text describes how the earth-god Enlil heard of the attack on Huwawa and sent his messenger to investigate. From the Assyrian version it is known that Enlil condemned Enkidu to die for his part in having slain Humbaba. It is clear from the new fragment that Enkidu was the real hero of this famous conflict which looms so largely in the legends and poetry of western Asia in prehistoric times. The companions at first met with a severe defeat and Gilgamesh wished to abandon the conflict, whereupon Enkidu, according to the new text, was exasperated at his cowardice and reminds him that his mother was a goddess (Ninsun) and that he is two-thirds a god, but is nevertheless a man of the city and not fit for warfare in the wild forests of the cedar clad mountains.

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"He that traps birds returns to his place,
 he that captures ordinary men returns
 to his home.
 Born in the city art thou, an ox-herd, a
 shepherd."

The new fragment ends in the midst of the account of how Enlil intervened to save Huwawa. It is known from the fragments of the Hittite version that the sun-god finally aided Gilgamesh and Enkidu by sending a cyclone against Humbaba; blinded by the storm, he was bound and slain.

In the Epic the outcome of this episode was the death of Enkidu, which revealed to Gilgamesh the terrible fact that death is the portion of all men. He sought to discover from the ghost of Enkidu how the dead fared in the lower world and was told the unspeakable miseries of those that die.

"Not shall I tell thee, my friend, not
 shall I tell thee.
 If I tell thee the law of the lower world
 which I have seen,
 Sit thee down and weep."

Enkidu during his last illness had seen the misery of souls in Arallû, in a dream.

"They are clad in a garment with wings
 like birds,
 And they see not the light, sitting in
 darkness.
 At the house of dust which I entered
 I looked and crowns lay there.
 They of crowns sat there, they that
 ruled the land since former times."

Alas, all that man has ever known of the "land of no return" has been by dreams of poets. Gilgamesh determined to escape from this sad fate of man, and the remainder of this long Epic is concerned with his quest for the plant of "never-grow-old", which he sought for and found in the isle beyond the sea, whither had been transported Ziusudra (Xisuthros), the Sumerian Noah. Having found the plant of "never-grow-old", as the Greek form of the legend describes it, he decides to take it home to Erech and grow it that henceforth all men might eat of that im-

mortal herb and none should die any more. But a serpent stole the plant while he rested and slept on his journey, and it was not man but serpents which obtained the power to cast their skins and retain their youth.

The Epic thus gave the poets the opportunity of telling the story of the Flood and how Xisuthros obtained immortal life. Traces of at least two great floods have been found at Kish, one in a level shortly after 4000 B. C. and one in a level about 3200 B. C. This disaster undoubtedly became one of the great traditions of that city and it is not surprising that the scribes made a careful edition of the original Sumerian Epic.

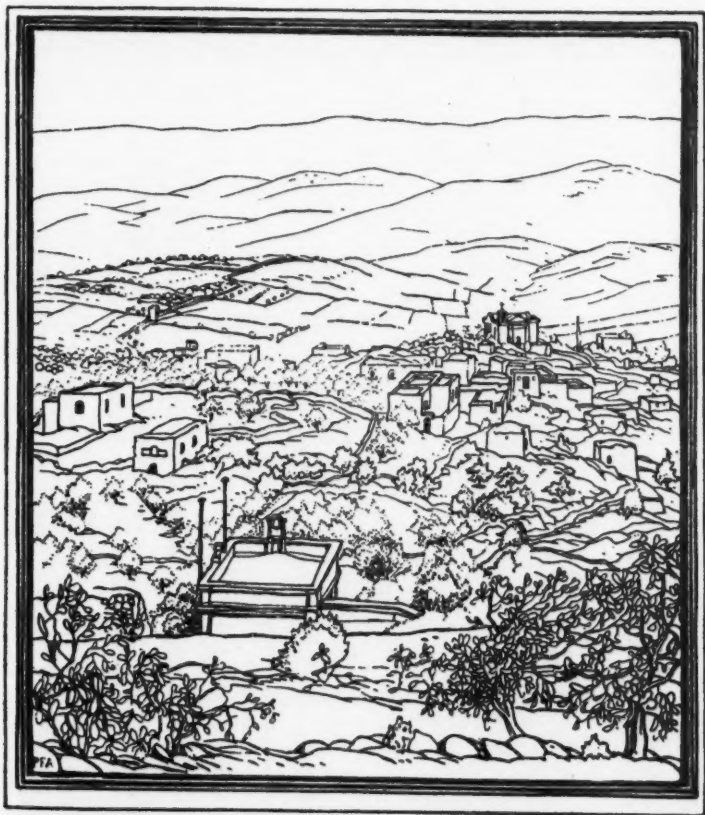
The recovery of an important fragment of what is obviously part of a carefully edited text of the old Epic encouraged me to investigate our present knowledge of the text of this older Sumerian edition. Fragments from Nippur were previously known from the work of the expedition at Nippur sent out by the University Museum of Philadelphia. In that collection, which was divided between the Imperial Ottoman Museum in Constantinople and the Museum of the University of Pennsylvania, I had already found evidence of an old Sumerian edition on a series of small single-column tablets; as long ago as 1914, I published* a tablet marked No. 42 in the Constantinople collection from Nippur, which is now found to be a duplicate of the Kish tablet—Col. II 4—III 10. Since this subject really opens up a new field of inquiry in modern Assyriological science—namely, the task of establishing the text of the old Sumerian edition of a famous Epic—it is imperative in the interests of science that the known sources be carefully indicated here, although this article is not intended to be more than a popular survey of the matter.

In 1917 I published the lower half of a single-column tablet from Nippur, No. 4564

(Concluded on page 332)

**Babylonian Expedition of the University of Pennsylvania, Vol. XXXI, No. 31.*

For unto us a child born, unto us a son is given:



Four pen drawings by Peter F. Anson from "A Pilgrim Artist in Palestine". Reproduced by courtesy of the artist and his publishers. Copyright, 1932, by E. P. Dutton & Company.

THE SHEPHERDS' FIELD, FROM BETHLEHEM

"SINCE THE TIME OF ST. JEROME AN UNBROKEN TRADITION HAS FIXED UPON THE HILL . . . THE ONE WITH THE SOLITARY TOWER STANDING BESIDE THE ROAD WHICH WINDS AWAY TO THE RIGHT, AS THE PLACE WHERE THE ANGELS ANNOUNCED THE BIRTH OF OUR LORD TO THE SHEPHERDS. . . . ON THE SIDE OF THE HILL ARE SEVERAL ROCKY CAVERNS WHICH MIGHT WELL HAVE SERVED AS A SHEEPFOLD ON A COLD WINTER'S NIGHT."

and the government shall be upon his shoulder: and



**GROTTO OF THE NATIVITY:
BETHLEHEM**

"HERE IS THE ENTRANCE TO THE GROTTO OF THE NATIVITY AT BETHLEHEM, TO WHICH SHRINE ALL CHRISTIANS MAKE A PILGRIMAGE, AT LEAST IN IMAGINATION, AT CHRISTMAS TIME. FROM THE NARROW ENTRANCE, WHICH DATES FROM THE XIIITH CENTURY, A FLIGHT OF STEPS LEADS DOWN TO THE GROTTO ITSELF. . . . THE TRADITIONAL SPOT WHERE OUR LORD WAS BORN LIES NEAR THE ENTRANCE. . . . ON THE STEP WE READ THE WORDS: *Hic de Virgine Mariæ Jesus Christus Natus est.*"

his name shall be called Wonderful, Counsellor,



"OH, LITTLE TOWN OF BETHLEHEM
HOW STILL WE SEE THEE LIE."

"A QUIET, TRANQUIL LANDSCAPE MADE UP OF CORN-FIELDS, OLIVE-GROVES, AND FIG-TREES SCATTERED HERE AND THERE. BUT IT IS IN THESE PLEASANT SURROUNDINGS OF BETHLEHEM, THAT SO FEW TOURISTS OR PILGRIMS HAVE TIME TO VISIT . . . THAT THE ARTIST LEARNS MOST ABOUT THE AGELESS SPIRIT OF THE BIRTHPLACE OF JESUS."

The mighty God, the Prince of Peace.— *Isaiah ix:6.*



LOOKING DOWN ON NAZARETH FROM
THE SALESIAN ORPHANAGE.

"A NEAT AND TIDY LITTLE TOWN . . . AND ITS WHITEWASHED HOUSES WITH THEIR RED ROOFS ARE SURROUNDED WITH GARDENS FULL OF FLOWERS AND FRUIT TREES, WHILE IN THE EARLY SUMMER THE BRIGHT YELLOW BLOSSOMS OF THE CACTUS HEDGES ARE AN ESPECIAL FEATURE . . . SYMBOLICAL OF THE FLOWER 'THAT WAS TO PRODUCE A FRUIT THAT FILLED THE WHOLE WORLD', THE 'ROD BLOSSOMING OUT OF THE ROOT OF JESSE'."

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MOHENJO-DARO: THE "MOUND OF THE DEAD"

By H. W. WAGSTAFF

*"And thus from hour to hour we ripe and
ripe*

*And then from hour to hour we rot and rot
And thereby hangs a tale."*

HARDLY a decade now passes without the addition of some important discovery to add to our rapidly growing knowledge of the early life of man on this planet. The accumulation of data is becoming almost embarrassing, yet in reality we are only just beginning to lay bare the abundant records of past civilizations which lie hidden just beneath the soil in countless river valleys, on arid plains or among barren, inhospitable hills, where they have remained unmolested through climatic changes and the rise and fall of Empires. We are, in fact, just entering upon a great inheritance. The stupendous monuments of the early historical period, such as those on the banks of the Nile or the remains at Persepolis, Palmyra and Baalbek, which so excited the admiration of the mediæval traveller, now give place to the less spectacular records of a remoter past, which the diligence of the archaeologist is bringing to light in all the corners of the globe. From the peaceful valley of the Dordogne, the inaccessible caves of Rhodesia, the lofty tableland of Central Asia; from every direction comes evidence of a multitude of prehistoric sites, yielding testimony in brick, stone and metal on which the early history of our first ancestors is being slowly built up. Hidden from our forefathers, untouched by the centuries and—in many cases—gently dealt with by the hand of time, these records now confront our view with here and there a human guardian, arms crossed and knees neatly folded under his chin. Their mouths are sealed, but from the nature of their burial we may derive some idea of the life and thoughts of those

early races in their long march forward from the dim past, when the use of tools first gave to some living creature favorably placed as regards climatic environment and physical structure, the dominion over the rest of the animal kingdom. Thousands of generations had yet to pass before this man-beast, now standing fully erect, began to bring the elements under his control, always improving those tools by which he was climbing to greater things. Slowly the old order changed.

"'Farewell, Romance,' the cave man said,

With bone well carved he went away,

Flint arms the ignoble arrow-head

And jasper tips spear today.'"

It was still many centuries before the earth gave up its store of metals, and iron, cold iron, became the master of them all. Gradually, the bow was superseded by the shepherd's crook and ultimately by the plough, as primitive man passed from the forest, across the wide steppes with their scanty pasture, to the well-watered river valleys, where agriculture first made settled life a possibility. Here in the intervals between seedtime and harvest, with a fiercer sun than that of the wooded hills or upland plains, men first discarded the leaf-covered hut and worsted booth for more substantial dwellings of mud, brick and stone. With a settled habitation and the leisure and security born of ripening crops, minds groped beyond the immediate necessities of self-preservation. Gods of the sky and earth, combining with the social necessities of a fixed community, began to engender those cults which have done so much both to elevate and to enslave the mind of man; while the pure creative instinct developed the arts through which he has ever striven to deliver himself from the entanglements of a mundane existence. Thus in

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many gardens of Eden, the seeds of civilization took root.

It is to be hoped that we have now finally passed the stage when investigators vied with each other in their search for some unique "cradle" of civilization. It would have been indeed surprising if one locality and one alone had been found to provide suitable conditions for the growth of settled communities. There are ample indications that the great European rivers fostered similar growths, though here the recurring ice caps set a term to continuous progress. Further south, this factor was inoperative, or if operative, its influences were possibly favorable to the maintenance of climatic conditions suitable to the steady development of these settlements. That such communities existed in a wide belt extending from the valley of the Nile through the twin-river basin in Mesopotamia, to the valleys of the Karun in Persia and the Helmand on the borders of Afghanistan, has been recognized for some time. Thus the discovery that the Indus river with its many affluents was equally a centre of early civilization is only in accordance with what we might anticipate. There is, however, a great deal of difference between prognostication and the production of detailed evidence. The inception of the archaeological survey of the Indian sub-continent is of comparatively recent date. The field is so vast, and the ruined monuments of the medieval period so many that it will be years before the whole country is fully explored, more especially in regard to prehistoric remains which lie concealed beneath the surface of the ground. It must, therefore, be of peculiar satisfaction to Sir John Marshall, the first Director General of the Department, that his life's work has been crowned in laying bare sufficient data regarding this early culture on which a very fair appreciation of its structure and achievements can be built up; a satisfaction which will be shared by all his devoted workers, who

have toiled for the last eight or ten years on the sandy plains of Sindh and the Punjab.

The official account of these labors, bringing our present knowledge of this civilization up to date, has lately been worthily produced in *Mohenjo-daro and the Indus Civilization* by Arthur Probsthain, of London. (3 Vols. £12.12.0 the set.) The work is monumental and exhaustive, both as regards the quality of the material and its presentation; a most beautiful example of the bookmaker's art. It is to be hoped, however, that at some future date, Sir John Marshall will be able to give the inquiring, though technically un-instructed, layman a more compact account within the reach of the private purse. In a general survey, the greater part of the detailed description of individual buildings and other remains, as well as some of the important, though highly technical matter, contributed by anthropologists and philologists, might well be omitted. The introductory and general chapters written by Sir John and some of the details provided by Mr. Ernest Mackay, together with a judicious selection of plates and the two excellent maps, will provide within a reasonable compass and at a moderate price all that the general public is likely to ask or require; while a single volume into which such material could be compressed would undoubtedly find not only a wide circle of readers but of purchasers also.

The evidence as to the age of the antiquities at Mohenjo-daro, or "Mound of the Dead", in Sindh and at Harappa in the Punjab, within a reasonable margin of error appear unassailable. The similarity of many of the remains to those at numerous other chalcolithic sites is well established, while the close connection between this Indus civilization and that of the early Sumerians in Mesopotamia has been accepted by most authorities. The date for the periods so far explored has therefore been provisionally fixed within the bracket 2750 to 3250 B. C., and there is little likelihood of these figures being modi-



MOHENJO-DARO FROM THE AIR.

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MOHENJO-DARO BEFORE THE EXCAVATION BEGAN

fied by subsequent research. It is quite certain, however, that the strata which still remain below the present excavations are considerably older, for the civilization already revealed is undoubtedly the result of many millennia of human endeavor. The examination of these earlier periods will be attended with considerable difficulty, for the level of the Indus valley at this point has risen upward of ten feet during the intervening centuries and parts at least of the earliest remains are now permanently under water, a circumstance which will not have contributed to their preservation.

It appears settled, therefore, that during what is known as the second predehuvian

period, centres of comparatively advanced civilization existed in the valleys of the Nile, Tigris and Euphrates, Karun, Helmand and Indus with possible extensions farther east. The culture in each of these centres shows distinct local characteristics, but there is sufficient similarity to suggest the existence of continuous communication, if not definite trade relationship, between the different areas. The phenomenon presents an interesting problem. How was it that this civilization—the most advanced of which we have any records at this period—developed in areas the present climate of which is extremely unfavorable to mental and physical effort, and which today only support a sparse popu-

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lation, exhibiting types of culture generally considered as backward? A change in climate is the most obvious solution, but how did this come about? One theory, skilfully developed by certain writers, notably Huntington in his *Civilization and Climate*, suggests that the rain-bearing winds from the Atlantic, which now water the northern half of Europe, were, during the last glacial and post-glacial periods, deflected south by the northern ice cap, bringing beneficent rain to the wide belt extending from the Sahara in Africa through Egypt to Mesopotamia, Persia and beyond.

This pluvial theory is certainly very attractive, as it solves at one stroke the problem for all the areas in question, but it presents certain difficulties. In the first place, there is no direct evidence that the rainfall in Egypt and Mesopotamia during the chalcolithic period was substantially heavier than it is today; while the theory takes no account of the gradual shrinkage in the areas affected by the southwest monsoon in western India, which has at any rate been going on since the dawn of the historic period. There are, however, undoubted indications that the rainfall in the Indus valley was more plentiful in prehistoric times than it is today. The domestic and wild animals, for instance, with which the inhabitants were most familiar—as witnessed by the varying skill with which they are represented—are all those which one would expect to find in moist regions. Later in mediaeval times, Sindh was watered by two large rivers, the Indus and the great Mihran, also known as the Wahindar or Hakra, the latter being now represented by the comparatively insignificant Nara canal. In the Punjab, the present affluents of the Indus were reinforced by a considerable river known as the Ghagghar, which is today but a dry bed with occasional disconnected pools of water during the rainy season. This river, flowing through the northern limits of what is now the desert of Rajputana, made pos-

sible the direct passage of travellers and even large bodies of troops from Multan to Delhi in a manner quite out of the question at the present day. To the west in Makran, the southern province of Baluchistan, which is now practically waterless, records of numerous trade routes testify to a more moderate climate towards the end of the first millenium A. D., though it must be borne in mind that the area was arid at the time when Alexander marched through it in the winter of B. C. 325-324. While not abandoning the pluvial theory, therefore, which has strong arguments in its favor, it must be recognized that in all probability there were and always have been many local factors, the interplay of which must have been constantly tending to change the climate. The huge ice cap to the north, although it may not have extended so far south in Asia as it did in Europe, would no doubt have had some effect in modifying the temperature apart from the rainfall, and there is reason to suppose that the climate in Sindh was substantially more temperate than it is at present.

The nature and age of these antiquities has at a stroke demolished the former theory that the Aryans, in their incursions into India from the northwest, brought a civilization and culture far in advance of that possessed by the inhabitants of the country they conquered and enslaved. It is generally accepted that the Aryans entered India between the fifteenth and twenty-fifth centuries B. C., and the discovery of an advanced civilization at Mohenjo-daro led some authorities, in the first instance, to suggest that this epoch would now have to be put back to a time anterior to these remains. There is ample evidence, however, for asserting that the culture laid bare in the Indus valley has no connection with that of these invaders, and must be definitely regarded as pre-Aryan. Whether it was Dravidian or not, remains to be seen, but there are indications that this is the case. A great deal of the evidence, as to the

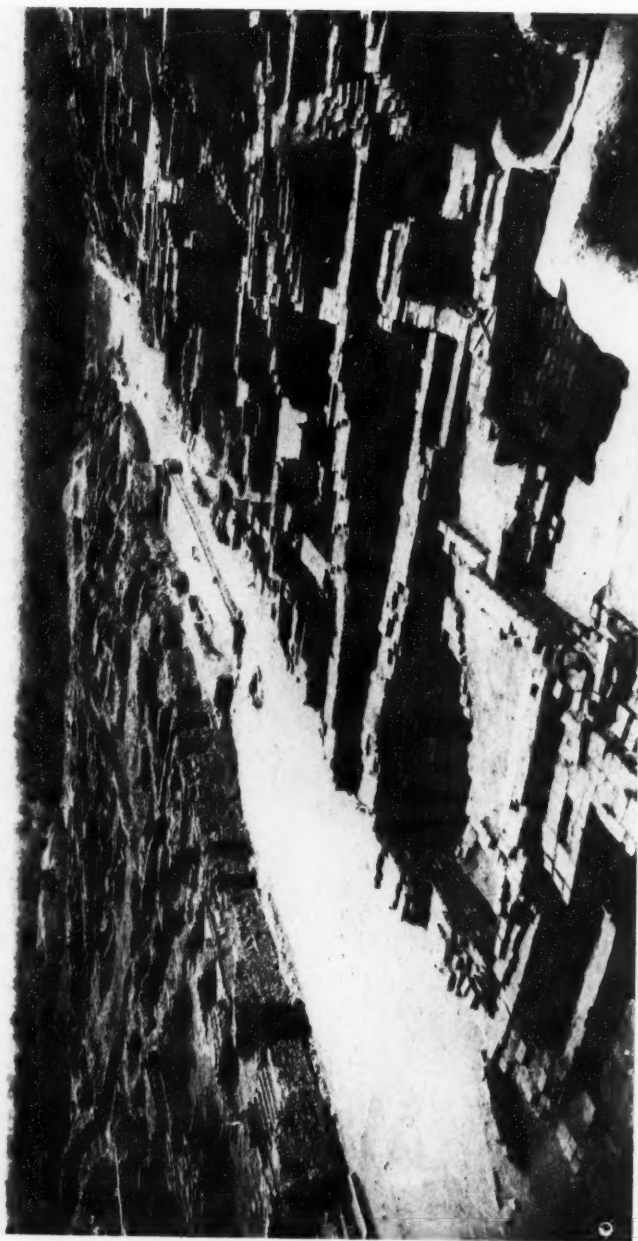
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superior culture of the Aryans at the time of their arrival, is based on early Vedic literature, and it is not perhaps surprising that these authors should depict their own civilization in glowing terms to the discredit of those whom they subdued. This may not have been entirely due to patriotic fervor, however, for the later periods unearthed at Mohenjo-daro shows signs of decadence, which may have been still more marked by the time the Aryans appeared in the plains of northern India.

Perhaps the most impressive feature of the remains at Mohenjo-daro is the size and construction of the dwelling houses. One is accustomed at similar sites in western Asia, to religious edifices or royal palaces of considerable magnitude on which all the architectural skill and material resources of the community have been lavished, while the mass of the inhabitants were housed in mean quarters of which scant vestiges remain. Here the reverse is the case. So far nothing in the way of a palace has been discovered, although there are several large buildings the purpose of which has not yet been determined, as well as other edifices which appear to have been public baths. Apart from these, the whole area is covered with houses of various sizes, from two-roomed quarters to commodious residences with many rooms. These provided amenities which are in advance of anything of the same period which has been discovered in Mesopotamia or elsewhere. The larger houses were built round an open courtyard as is customary in the East at the present day, and had at least two stories, the second being reached by an internal staircase. Burnt brick is used even in the less pretentious dwellings, wherever the walls are exposed to the elements; while the ground floors were paved with brick placed on edge in the bathrooms or at other places where they would experience hard wear. The upper floors apparently consisted of planking on wooden beams, which have

of course, perished. The roofs were probably flat, although the corbelled *sikhara*, which appears very early in historic Hindu architecture, might be suggested by the abnormal thickness of the walls, which would be required only in the case of superstructure of considerable weight. Most of the houses of any size were provided with bathrooms and wells. The former were usually connected with the street drainage, while the circular wells are admirably built of burnt bricks. Drains, both for carrying off rain water and for domestic purposes, are abundant in the houses as well as in the public thoroughfares, the latter being led into soak-pits at intervals. Of the buildings which may have been of a public character, the most important are a large pillared Hall and a Great Bath. The latter appears to have been part of a vast hydropathic establishment. Here again, the design is simple, massive and adequate from a constructional point of view. The general impression conveyed by all these remains is of a community in which the standard of living was not only remarkably high, but was widely diffused, without very marked differences in the conditions under which various sections of the population lived.

The artistic achievements of these Indus valley dwellers, both as regards applied and pure art, suggest some interesting speculations. On the whole their work was strictly utilitarian; there is little ornament for ornament's sake, and such designs as embellish their painted pottery are commonplace and without imagination. Yet at times, they were capable of works of great aesthetic merit. Considering that their houses were so large and commodious, it is strange that they had not discovered the true arch, as had their contemporaries, the Sumerians, more especially in view of the fact that most of their wells are lined with shaped bricks. The Sumerians had also explored the architectural possibilities of the column, which has not so far been found at the Indus sites. Sir John



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THE MAIN STREET IN MOHENJO-DARO.

ART AND ARCHAEOLOGY

Marshall perhaps hardly does justice to the very fine lines displayed in many of their earthenware vessels, though it is true that the decoration of their pottery never reaches a high standard.

When we pass to glyptic art, however, as represented in the intaglio engravings on the multitude of seal or talismans which have been unearthed, we seem to be translated into a different world. The accuracy of delineation, breadth of treatment and feeling for plastic form show the extraordinary degree of skill to which the worker had attained, a skill which was apparently exhibited by a whole school of artists, for the seals have been found at different levels, separated by at least some generations. On the other hand, their work in the round, with two extraordinary exceptions to be considered later, was not outstanding. The crudity of those small human and animal models which were apparently toys is quite understandable: they would be turned out by the score by indifferent workmen. It is not so easy to understand the lack of skill displayed in the other class of human figurines, which were presumably cult images, as they almost always represent the mother-goddess or "Great Mother", whose worship was so widespread among primitive societies. More ambitious statuary is rare. At any rate, very few specimens have come to light, and the majority of these do not approach the seals in artistic merit.

There are, however, two mutilated statuettes which so far surpass any other relic as to raise grave suspicions as to the possibility of their belonging to the period we are discussing. Sir John Marshall admits that he originally shared these doubts, and gives in great detail the circumstances attending their discovery and the arguments on which he is compelled—still a little against his better judgment—to accept them, at any rate provisionally, as contemporary with the other works of art of this civilization. Both

these specimens come from Harappa in the Punjab, while the other figures in the round come from Mohenjo-daro, yet there is no shadow of doubt that the two civilizations were contemporary. The first of the two statuettes is a torso of dark grey slate presumably that of a male dancer. If, as seems probable, the body had three heads, or at any rate three faces, it was possibly the statue of a deity in a pose which can be seen in many Hindu temples at the present day. The other statuette is also a torso but of red stone, more mutilated than the former, but otherwise well preserved. The figure is again that of a male, the only peculiar feature being two shallow sockets on the front of the shoulders whose purpose is hard to guess unless it indicates the existence of a second pair of arms, although this is not suggested by the authorities who have examined it. Whatever the original pose and composition of these two statuettes, the astonishing fact remains that in modelling and general execution they are comparable to Greek work of the fourth century B. C.! Granted that the skill displayed by the artists who produced the best specimens among the seals was on a level with that which executed these two statuettes, it is difficult to understand how the general level of execution of other work in the round is not higher; and still more difficult to understand how this very early civilization, although remarkably advanced in many ways, could have produced these exquisite works of art which have rarely been equalled or surpassed in the succeeding 5,000 years!

What, then, did these dwellers by the Indus in their substantially constructed houses, with their abundant pottery, their stone and metal implements, their wheat and barley, and cotton garments, their domesticated animals and wheeled vehicles, their personal jewelry and finely executed talismans—what did these people think about the universe of which they must have appeared, and possibly were, the noblest product? We know little as yet. We



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AMONG THE RUINS AT MOHENJO-DARO. VIEW OF A COVERED DRAIN.

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cannot even tell if the larger buildings, such as the great public bath and the hall of pillars, served any religious purpose. Sufficient evidence exists, however, for a tentative estimation of their spiritual development. As we have seen, figurines of the well known "Great Mother" or "Mother-Goddess" are abundant, indicating the existence of a cult which can be linked up without difficulty with similar religious tendencies, both in contemporary civilizations and in those much later. The stone *linga* and *yoni* representing the male and female generative principles have been found in considerable numbers and in a great variety of sizes, pointing to cults which are still prevalent throughout the length and breadth of India, with the possible exception of the northwest. More important evidence is, however, furnished by one of the larger seals, which depicts a seated three-faced deity. The posture with legs bent double, heel to heel, and toes turned downwards, is the typical yogi position of the historic god Siva, while the throne is supported by two deer, also a familiar feature in medieval portraiture of this divinity. With these data and other indications, such as the probable sacred nature of the bull depicted on most of the seals, several conclusions present themselves. In the first place, the religious phase through which these people were passing is typically Hindu and contains none of the importations which the Aryans brought to the original faith. The cults still practised in many of the backward parts of India hardly differ from those which must have existed 5,000 years ago, and this certainly suggests that Hinduism, as a religious system, is the oldest in the world. The corollary is equally pertinent. No religion has shown such conservatism, and has been so little influenced by the progress of civilization during the fifty centuries which have elapsed since the time when these cults had already become systematized.

So far no cemetery has been found at Mohenjo-daro, although at Harappa—the

remains at which represent a slightly later age—regular burial appears to have been in vogue. There are, moreover, indications that at the former site, cremation was the general practice. A number of human skeletons have been unearthed, however, though how these individuals met their death is not certain. Most of the skeletons were found in the earth excavated from streets or lanes in the city, which might point to accidental or violent



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STATUETTE IN GREY STONE FROM HARAPPA.

death; in fact, the practice of human sacrifice, although doubtful, is not beyond the bounds of possibility. The curious thing about these skeletal remains is that they include representatives of several distinct races: Proto-Australoid, Mediterranean and Alpine types are all represented, and from the situations in which they were discovered they appear to date from the declining years of

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ART AND ARCHAEOLOGY

Mohenjo-daro's prosperity. Most of the skulls are unfortunately in a very battered condition, while the saltpetre in the soil has so acted upon them that they fall to pieces as soon as exposed, unless steps are immediately taken to prevent this. With the scanty data available, it is no doubt advisable to reserve judgement regarding such tentative conclusions as have been reached, and the

Egyptian was at once evident, but the nature of this relationship was by no means clear. The latest finds of early Sumerian writing in Mesopotamia, however, have established with a fair degree of certainty that the two scripts, even if they owe little to each other, were probably based on a common ancestor. In both cases, the purely ideographic stage has already been passed, though the Indus script



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GENERAL VIEW OF THE GREAT BATH AND ITS SURROUNDINGS.

specialists to whom they have been submitted rightly refuse to be dogmatic.

The mass of inscribed seals, already referred to, nearly all of which bear examples of writing, provide a good deal of evidence as to the nature of the script used by the Indus dwellers. That it is related to other quasi-pictographic scripts, such as the Proto-Elamitic, Early Sumerian, Minoan and

never reaches the purely conventional cuneiform code which developed later in Mesopotamia. Although the writing is not alphabetic, Professor Laughton has made out a strong case for deriving the early Brahmi alphabet of India from the Indus script. So far attempts to decipher it have failed, and it may be some time before sufficient data, or the lucky, though improbable, discovery

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of some bilingual seal will reveal its secret. A solution to this riddle will no doubt throw a flood of light on many aspects of the Indus civilization about which our present conclusions are but tentative.

We have surveyed all too cursorily the wealth of material gained in the last few years from one or two sites in western India. A glance at the excellent map provided by Sir John Marshall as well as a perusal of his pages, fully demonstrates that the field for further exploration is almost limitless. In no part of the globe perhaps are known sites awaiting investigation provided in such profusion. Whether in the bare hills of Baluchistan, the sunbaked plains of the Indus, and the jungles of central India, innumerable

remains beckon to the excavator. Unfortunately, excavation is expensive if properly carried out, and if not properly carried out is worse than useless as it destroys the very evidence which it is intended to obtain and preserve. So far it can hardly be denied that funds the Government of India has been able to allot for this work are insignificant compared with the requirements, nor is it likely that, in the near future at any rate, the Government will be in a position to show greater liberality. Taking the Baluchistan area alone, it has been estimated that if funds were forthcoming to the extent of half a *lakh* of rupees (about \$13,000) a year, there is sufficient work at the rate of progress this sum implies to last a thousand years! Under these circumstances, the only reasonable solution to the problem is to enlist the cooperation of institutions and individuals outside India.

There are, of course, those who consider that everything of archaeological or artistic interest which is found on these sites, naturally belongs to India and should not be allowed to go outside its borders. But it is hardly to be expected that money and energy will be forthcoming from without in so speculative a business as archaeological excavation, when the reward is not in some way material. The spoils are ample for all, and it should not be beyond the capacity of Government to make conditions sufficiently attractive so that the results of exploration can be equitably divided between the nation and those interests willing to provide the money for the work. It is true that the present regulations do provide for such a distribution, but it is on the interpretation of these regulations that the attractiveness of the prospects depend. There is ample evidence from other countries where the resources of Government have been inadequate to meet the requirements, that money is forthcoming if the inducements are sufficiently great. The only alternative is indefinitely to postpone the exploration of these many sites.



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STONE IMAGE FROM MOHENJO-DARO.



"CAMPUS MARTIUS" OR RUFUS PUTNAM HOUSE, BUILT 1788-91. THE FRONT SHOWN WAS THE S. E. BUILDING IN THE "CURTAIN WALLS" OF CAMPUS MARTIUS, THE GREATEST FORTIFICATION OF ITS TIME.

OHIO'S CAMPUS MARTIUS

By E. M. HAWES

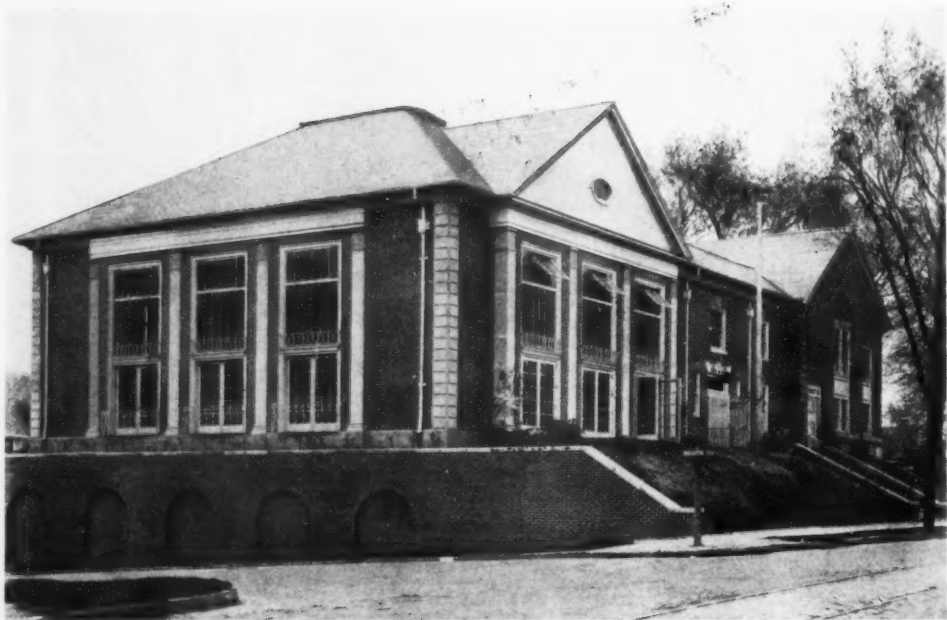
IN "The Ohio Country out beyond the mountains" of early American days lies an association of archaeological relics and remains, unusual in that it dates from unknown times and peoples down through the days of French ownership and into the dramatic pioneer beginnings of our own nation.

Perhaps the most unusual feature is that relics of all these widely separated periods are unusually well preserved for the present and for untold future generations.

Starting with remains of that mysterious race—or those races—commonly known as the Mound-Builders, the Ohio Valley abounds in an array of at least reasonably preserved examples of their earthworks which nonplus present civilization as to their purposes, their occupants, and their age.

Whether they are the work of one civilization or of several lends to endless argument, in view of the confusing lack of homogeneity of the available evidence.

Whether agrarian peoples, depending upon agriculture and the streams, could have been responsible for such monumental fortifications as Fort Ancient, Fort Hill, Miami Fort, etc.; whether the same races which built these tremendous strongholds also built the geometric enclosures, the embrasures and the mounds of the valleys; what were the purposes of many of the extensive works; what the significance of the "Great Serpent" and hundreds of other effigy mounds of lesser extent; when did these evident but unknown people live; and what was their civilization or were their several civilizations—all this



THE REAR PORTION OF THIS BUILDING COVERS THE CAMPUS MARTIUS HOUSE. THE BALANCE IS DEVOTED TO MUSEUM EXHIBITS, HALLS, ETC.

has been and is the subject of many researches and much speculation.

Sufficient is the fact that all through the Ohio Valley may still be found vast numbers of these tumuli and other works sufficiently well preserved to excite the interest and the curiosity of the layman. Nor are they isolated or so widely scattered as to make them hard or tedious of access. Within a week-end's drive any or several of these many groups of earthworks may be visited.

The Newark Works, Flint Ridge—source of aboriginal weapon material for a radius of a hundred miles—Miami Mound, Fort Ancient, Fort Hill, Great Serpent Mound, the Portsmouth, Bainbridge and Marietta groups are all within a radius of an hundred miles. The Ohio Archaeological and Historical Society at Columbus, the Campus Martius Memorial Museum at Marietta, and several smaller museums in the area contain good exhibits of Mound-Builder relics.

The Mound-Builder works at Marietta, Ohio, are fairly typical, and inasmuch as the subsequently archaeological interest which is the further subject of this article is also at Marietta, both may be here briefly described.

The confluence of the Ohio and Muskingum Rivers has obviously long been recognized as a desirable site for human habitation. On the very spot where the pioneers of 1788 laid out their first townsite, a more primitive people untold centuries before had builded a city of their own.

Forty acres were enclosed in one area alone, with earthen walls six to ten feet high with frequent gateways. Another enclosure of great size is reputed to have been located north of this one, but it had largely disappeared before the settlement of the white man. The walls of this prehistoric city have now mostly been plowed down in the building of modern Marietta.

Leading to the Muskingum River from

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this great fortification was a "covert" or hidden way which intrigues even engineering minds of today. Probably a protected outlet to drinking water, to water transportation, and to fishing-grounds, this sunken passage was 231 feet from crest of wall to crest of wall and about four hundred feet long. Its depth was twenty-one feet, and along the bottom ran a well-crowned turnpike sixty feet wide which might be the envy of many a modern road-builder. This "covert way" was named "Sacra Via" (Sacred Way) by Marietta's founders. Unfortunately it was not so sacred to some later generations as it seems to have been to the pioneers, and it was allowed to disintegrate

and disappear several generations ago. The site is retained as a city park, however, and people yet living saw it in well-preserved form.

That these obscure races had a considerable knowledge of engineering is further indicated by the great burial-mound, given the name of "Conus", by the first settlers. (Marietta's forbears had a great penchant for Latin names, as appears from the names bestowed upon all the Mound-Builders' works.)

This mound is sixty feet high and 375 feet in circumference. This is not so mysterious as there are many perfectly conical mounds in the Ohio Valley. But the mound is surrounded by a moat and parapet which is elliptical, being 215 feet in diameter on one axis



"CONUS," ONE OF THE MOST PERFECT SPECIMENS OF MOUND-BUILDER'S WORKS. IT IS NOW SURROUNDED BY "MOUND CEMETERY", WHERE THERE ARE SAID TO BE MORE REVOLUTIONARY OFFICERS BURIED THAN IN ANY ONE OTHER CEMETERY IN THE NATION.

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and 230 on the other. It is laid out with a technique which must have involved some considerable knowledge of symmetry if not of geometry.

It was a burial mound and human remains have been found in it, but the excavation was filled up and chieftain or whoever may occupy it rest in his or their original state probably for all time to come.

Two other great works are preserved in all the perfection in which they were found a hundred and forty-odd years ago, for the Revolutionary officers whose hunt for new homes in the west led them to Marietta, decreed that these curious works should remain public grounds. At times considerable acrimony resulted from the attempts of more aggrandizing settlers to cultivate the ground and plow down and destroy their contours. The "Quadranau" and the "Capitolium" are both large, probably sacrificial mounds within the forty-acre fort, and both are also perfectly preserved today. All these works remain in "public commons" and are situated in the midst of modern Marietta.

The city again looms up in historic lore as the location of one of the five leaden tablets buried in 1749 by Céron de Bienville in retaking possession of the lands of the Ohio in the name of the King of France.

Five or six of these lead plates were buried at the mouths of tributaries of the Ohio along its course. The Marietta plate was found by boys playing at the mouth of the Muskingum in 1798. Unappreciative of its value it was partially melted up for leaden bullets. Its remaining portion is now in a museum in Massachusetts. Another of these plates was unearthed at the mouth of the Kanawha in 1846.

Less than forty years after de Bienville made his gesture of reestablishing the title of France, this vast fertile empire was the property of our new-born nation. "The Ordinance of 1787" had been passed; the New England Ohio Company formed; and the

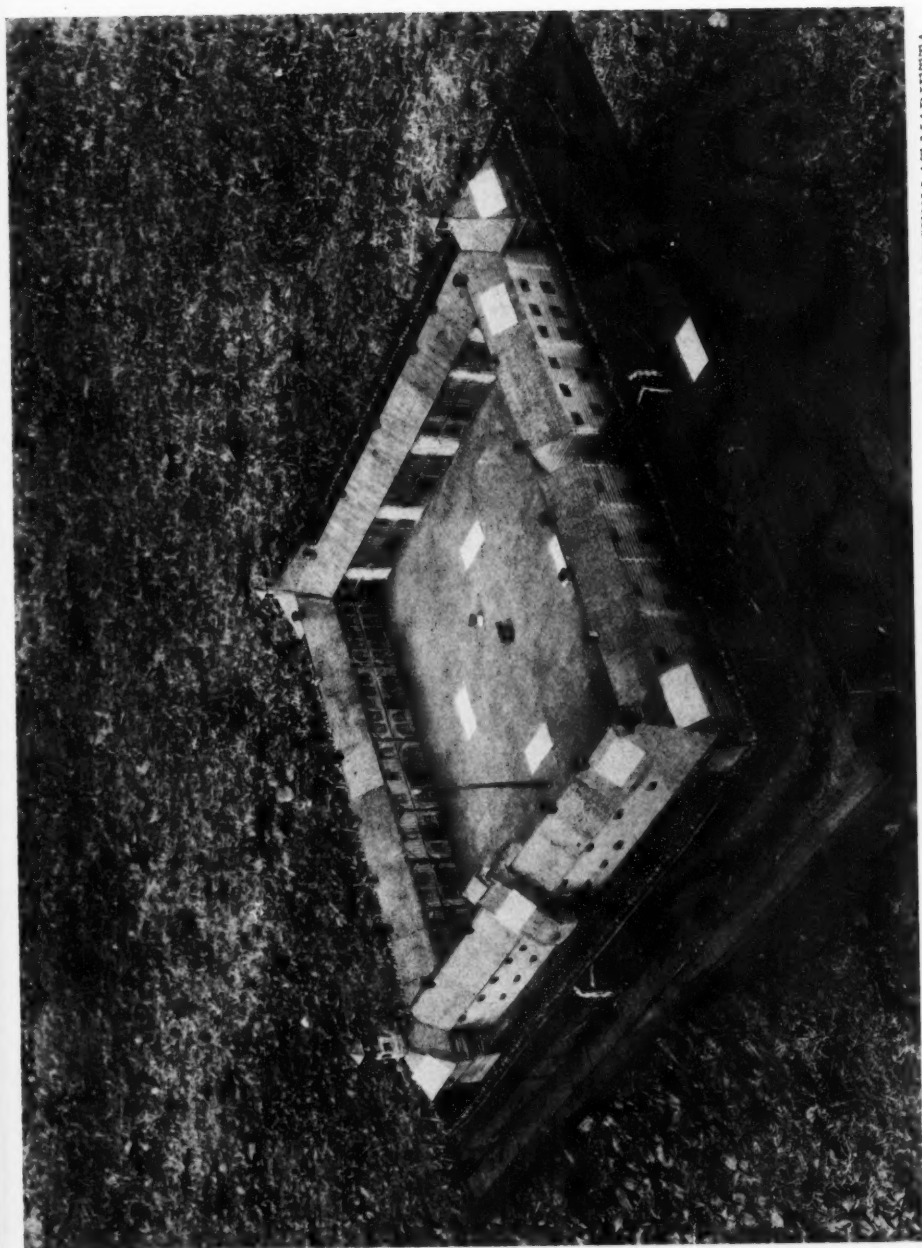
first group of Washington's old soldiers and officers had started the long trek formally to establish American government in the New Country. And here "at the confluence of the Muskingum and the Ohio" in 1788, the United States made its first venture in the march which was to take it from ocean to ocean. Most of the Pioneers had been prominent New England men in the army and in the councils of Washington during the Revolution. They were like all Colonials, impoverished by the war except for continental currency which "wasn't worth a continental"—except to pay to the government for land.

Rufus Putnam, former Brigadier General and Chief of Engineers for Washington's armies, was in charge. It was he who planned and built "Campus Martius", "the most elegant pile of buildings west of the Alleghanies and the strongest fortification in the United States," which housed the pioneers during the dangerous Indian wars.

And, along with the "land office" of the Ohio Company, the oldest building still standing in this northwest territory, a portion of Campus Martius still exists—so far as known the only actually remaining building of any fortification of the period. Gen. Putnam lived in one of the corner "curtain buildings" which had comprised the walls of the fort. After Campus Martius was dismantled he remodeled and added to this original structure. But this "Rufus Putnam House" or "Campus Martius House" has come down to the present with certain portions just as it was in 1788. This venerable relic is now the property of the State of Ohio and has been entirely enclosed in a handsome glass and brick structure to preserve it for centuries to come.

As a part of this New Campus Martius Memorial Museum a replica of the entire fortification has been built and installed in one of the exhibit halls.

This replica is built on a scale of 3-16ths of an inch to one foot, so that the fort, which



THE REPLICA OF THE CAMPUS MARTIUS HOUSE, NOW IN THE CAMPUS MARTIUS MEMORIAL MUSEUM AT MARIETTA, OHIO, IS AN EXACT DUPLICATION IN MINIATURE OF THE ENTIRE FORTIFICATION. SMALL PLACARDS POINT OUT THE INTERESTING HISTORICAL FEATURES, PERMITTING THE OBSERVER TO GET A HUMAN-INTEREST UNDERSTANDING OF THE CONDITIONS AND USES OF THE FORT.

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was one hundred and eighty feet square, and it environs now appear on a base 51 inches square.

The houses, which were 18 feet wide and two stories high, are $3\frac{1}{2}$ inches wide and about 4 inches high in the replica. Yet everything is to scale; hewed timbers being shown, and the individual bricks in the chimneys—although the chimneys are only $\frac{3}{8} \times \frac{1}{2}$ inch. In the cupola hangs the tiniest of bells. The round, brick-curbed well is an inch across. The sun-dial by which the Campus Martius pioneers told time is half an inch high, and for its pedestal the tiniest collar button available was used. In two of the bastions are shown the fort's 4-pound cannons, each an eighth of an inch in diameter.

Sewah Studios, which were commissioned to execute the reproduction by the State, conducted a vast research in establishing the fac-

tual basis of the fort. Drawings in existence varied materially, as did even historical accounts. Research was made into the original records of the Ohio Company, and the papers of Gen. Rufus Putnam and others in order to eliminate so far as possible imagination and approximation.

The defenses shown are interesting. Beyond the blockhouses, curtain-walls and bastions of the fort itself, there were three outer defenses. First a palisade, with timbers laid at an oblique angle to the fort and resting upon stout rails. Second, the stockade of pointed logs set in the ground; and third, the abatis, which was made from the tops of trees (whose timbers had been used in the stockade, etc.). The limbs were sharpened to points and the tree tops set pointing out, presenting a most formidable defense for attacking Indians to get through. The barbed

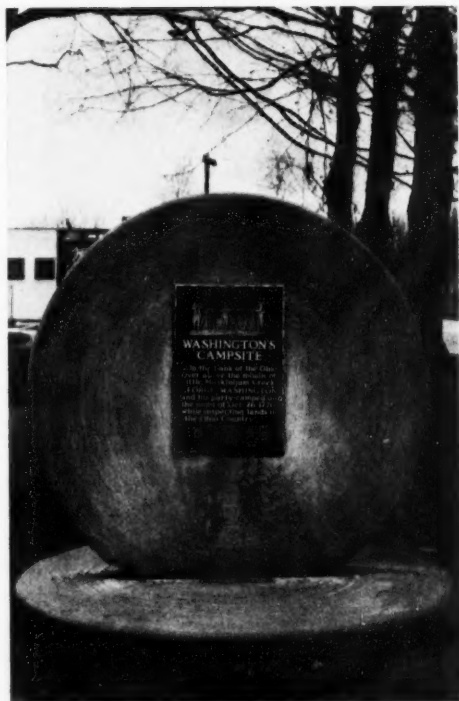


THE OHIO COMPANY LAND OFFICE—THE OLDEST BUILDING STILL STANDING IN THE "NORTHWEST TERRITORY". ITS BEAUTIFUL PANELLING INSIDE IS ILLUSTRATIVE OF THE CRAFTSMANSHIP OF OUR PIONEERS, WORKING WITH HAND TOOLS ONLY.

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ART AND ARCHAEOLOGY



MONUMENT ERECTED AT RENO, OHIO, BY THE D. A. R., IN COMMEMORATION OF WASHINGTON'S TRIP TO THE OHIO COUNTRY IN 1770. THE BASE IS TWO LARGE GRINDSTONES $6\frac{1}{2}$ FEET IN DIAMETER.

wire entanglements of modern warfare are the modern counterpart of the abatis, and could hardly serve any better as a deterrent to an enemy.

Small placards about the replica point out the interesting historical features, permitting the observer to get a human interest understanding of the conditions and uses of the fort.

Gov. St. Clair's home, the rooms in which the first courts and Sunday schools, etc., were held, and the portion of the original fort which was remodeled into the Rufus Put-

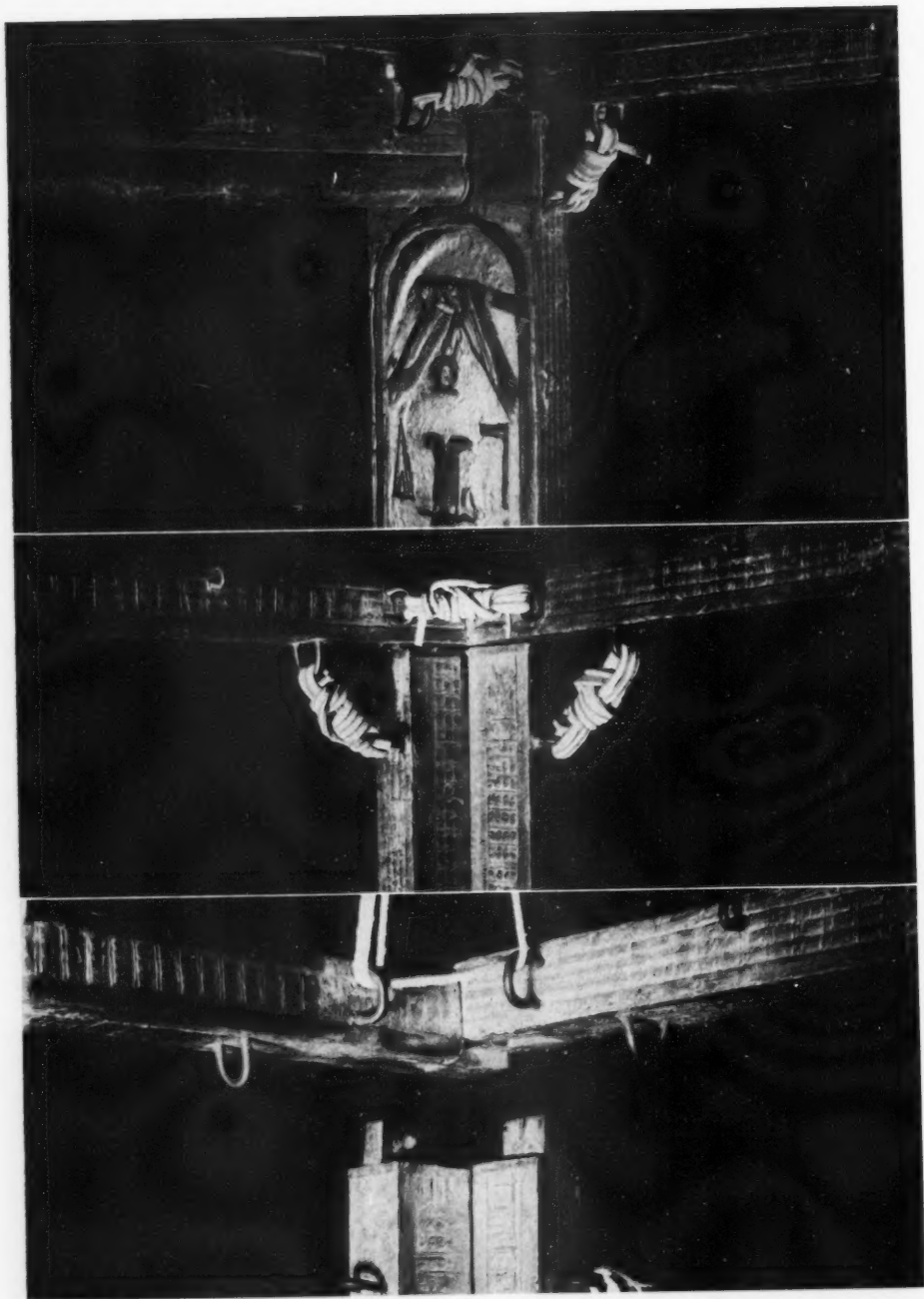
nam House are shown. This latter feature alone is of great help to the thousands who visit the Museum and inspect the old house with its mortised and pegged timbers, but who have been unable to place the structure in the large fortification of which it was a part.

An extremely interesting feature of the old house itself is the Roman numerals cut into each piece of hewed or whip-sawed timber, by means of which every one was assembled in its proper place.

The Rufus Putnam House has been furnished with actual furniture of its own time, so that it is one of America's best period Museums.

Beside the relics of the arduous days of settlement there are to be seen in Marietta many fine examples of New England architecture, erected by the pioneers as they accumulated new wealth and position, and now splendidly preserved and occupied by their descendants or by others. Thousands of architectural and art students as well as others interested in archaeology and genealogy yearly visit this mecca of interest to lovers of antiquity.

Only a short twelve miles down the Ohio River is Blennerhasset Island, site of the famous Harman Blennerhasset mansion and the melancholy Aaron Burr "plot"—if plot it was. Four miles up the Ohio is one of the campsites of Gen. Washington on the 1770 trip into the Ohio country. The bearing of this trip upon the subsequent westward expansion of the United States is becoming recognized by historians. And here and there under palatial homes the favored visitor to Marietta may be shown spooky remains of "black holes"—with substantiated but gruesome stories of "underground railroad" days.



(Top) CANOPY. LEFT HAND FRONT CORNER UPPER END FROM THE INSIDE, SHOWING THONG TIES.
 (Center) THE UPPER LEFT HAND CORNER AT BACK SHOWING THONG TIES.
 (Bottom) UPPER LEFT HAND CORNER AT BACK SHOWING COPPER CASED TENONS AND COPPER SOCKETS.

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THE BED CANOPY OF THE MOTHER OF CHEOPS

By GEORGE H. REISNER

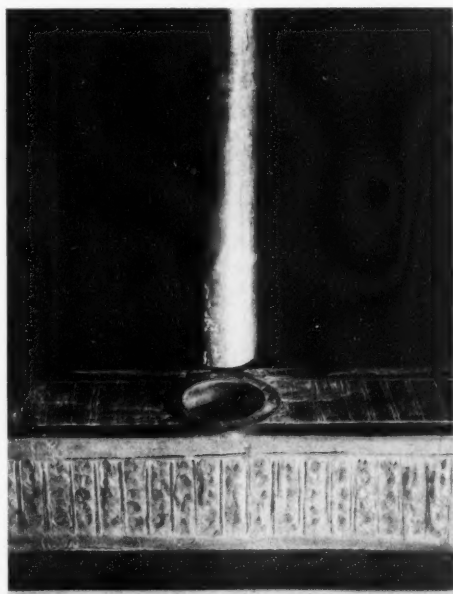
Acknowledgement is made to the Museum of Fine Arts, Boston, for permission to publish this article and the photographs which illustrate it.

THE gold-cased bed-canopy of Queen Hetepheres I, the mother of Cheops, was delivered by the Harvard-Boston Expedition to the Cairo Museum on March 10, 1932. The canopy consists of a framework of three floor beams, four upright posts of which two form the jambs of one side which was open, four roofing beams supported by ten slender poles, and five roofing poles. The inscription in relief on each door-jamb gives the titles and names of King Sneferuw, who presented the canopy to his wife. The inscription reads: "The Horus Nebma'at, the great god, endowed with life, endurance (twice) and power (twice), the King of Upper and Lower Egypt, lord of the two crowns, Nebma'at, the Golden Horus, Sneferuw (in a cartouche), lord of the *hpt* (-ceremony?), the Golden Horus, foremost of the places of the god forever." The simplicity and light grace of the whole canopy testify to the artistic sense of the Egyptian craftsmen of the reign of Sneferuw (about 3000 B. C.).

The whole canopy measures 3.20m. in length by 2.50m. in width and 2.20m. in height. Around the tops of the roofing beams on all four sides runs a row of small hooks on which the linen curtains were hung, and these were tied to a row of small staples which were outside the floor beams on three sides. The bottom of the curtain was free across the doorway to permit entrance and exit. The roof was probably also shielded by a curtain which passed under the roofing poles. Thus the queen, when in her bed chamber, was screened from view and saw only a white cubicle around her. The bed with its mattress stood along the back of

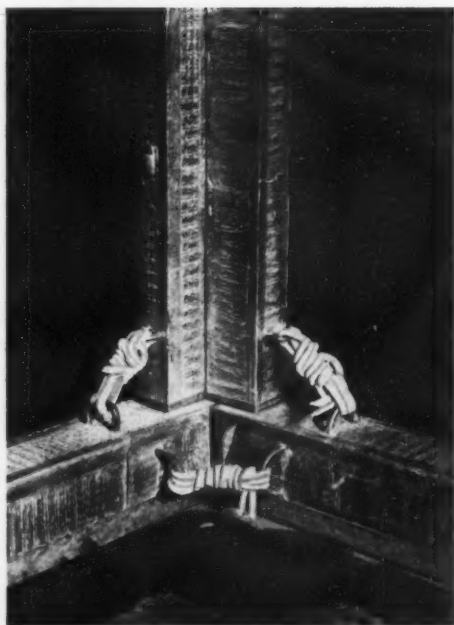
the canopy, with the headrest lying on it as is shown by the pictures of several such canopies carved on the walls of offering chapels of the pyramid age. The bed and the headrest are in the Cairo Museum and will be placed in the canopy. This is the only complete example of an Old Kingdom bed-canopy ever recovered. The late Mr. C. M. Firth found the remains of a similar canopy in the tomb under the southern boundary wall of the Zoser pyramid, but this was too decayed for reconstruction.

The secret tomb of the mother of Cheops was found in March, 1925, and cleared in 1926-27 by the staff of the Harvard-Boston



COLUMN BOTTOM END, SHOWING COPPER FERRULE AND UPPER SOCKET IN FLOOR BEAM.

ART AND ARCHAEOLOGY



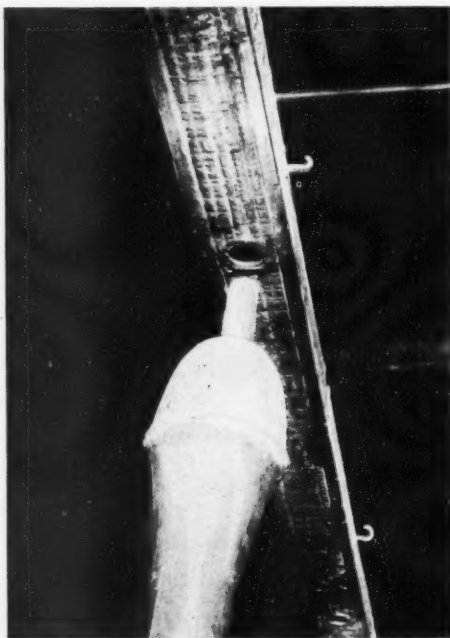
BACK LEFT-HAND CORNER LOWER END, SHOWING THONG TIES FROM INSIDE.

Expedition. The canopy was lying dismounted, the majority of the parts on the alabaster sacrophagus but some of them fallen down behind it. The wood had been destroyed by fungus but the gold sheeting which covered the wood was perfectly preserved (except for a few ancient tears). The twenty-five different pieces of which the canopy is composed were joined by tenons and sockets in which the tenons fitted. These parts were all cased in copper to form practical bearing surfaces. At each of the four corners the joints were further secured by heavy copper staples bound together by twine or rawhide thongs. The copper staples were all found attached to the gold casing. An attempt to clean these was made by Mr. Lucas but it was found that many of them were too corroded to be used again. It was therefore decided to have them reproduced in new copper. The restoration was first begun by the

construction of a half-sized model made by the staff. The reconstruction of the final model was begun by Mr. W. A. Stewart after he had finished the carrying-chair, the bed, the arm-chair, the jewel-box, and the headrest. Except for some of the woodwork and part of the copper fittings, the canopy as it now stand is the work of Mr. Bernard Rice, using the expedition records, and was begun in September, 1930, and finished in February, 1932.

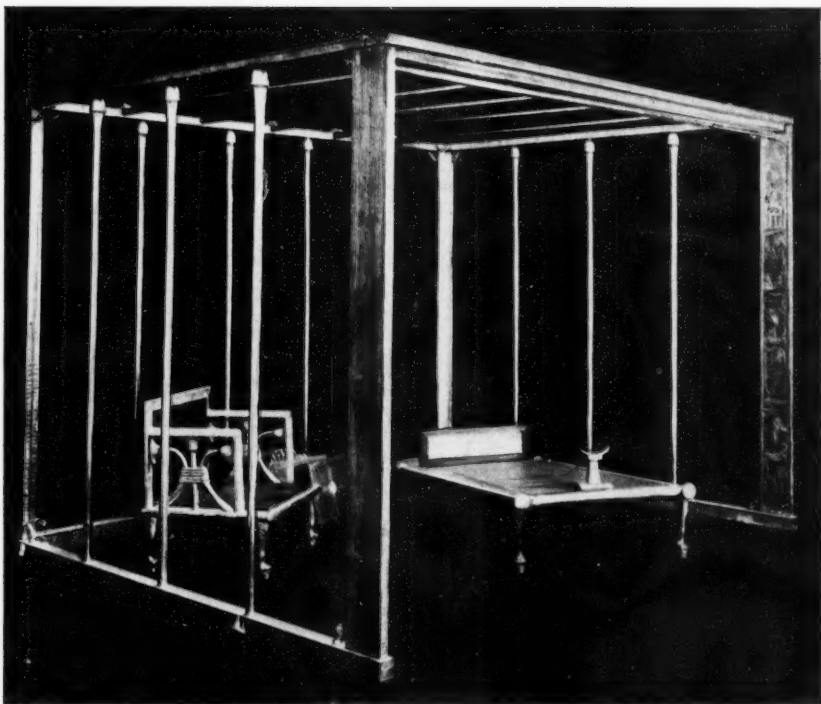
The canopy was actually a portable bed-chamber of Queen Hetepheres, presented to her by her husband Sneferuw. It can be taken down in about fifteen minutes and set up again in about the same time. There can be no doubt that this canopy was transported for the use of the queen whenever the king changed his quarters from palace to palace.

The ancient construction of the canopy



CANOPY COLUMN, TOP END, SHOWING COPPER CASED TENON AND COPPER SOCKET IN ROOF-BEAM. NOTE CURTAIN-HOOKS.

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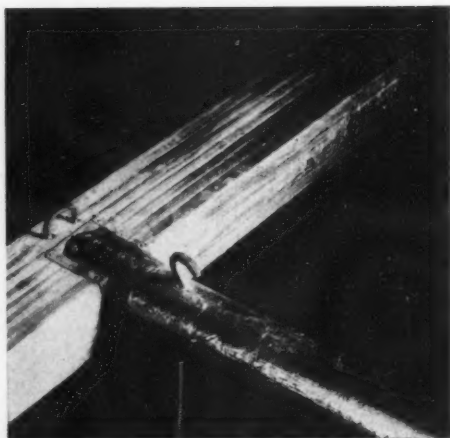


THE GOLD-CASED BED-CANOPY OF QUEEN HETEPHERES I, THE MOTHER OF CHEOPS, WAS DELIVERED BY THE HARVARD-BOSTON EXPEDITION TO THE CAIRO MUSEUM ON MARCH 10, 1932.

was as follows. The wooden parts were first prepared and carved with the inscriptions and mat-designs which covered all the exposed surfaces. The tenons and sockets were cut in the wood, perhaps before carving the surfaces. After that the heavy copper staples were driven into and through the beams at the proper places and the ends hammered down on the other side. These ends were sunk in the wood and covered with plaster to conceal them from view. Then the gold sheeting, which varies in thickness, was laid over the wood and hammered to fit the carved hieroglyphics and mat-designs. The details of the hieroglyphs were added with a pointed tool. Where there was a staple, the gold sheet was cut out so that the staple slipped through the slot. The slot was then repaired with a small piece of gold sheet. At this

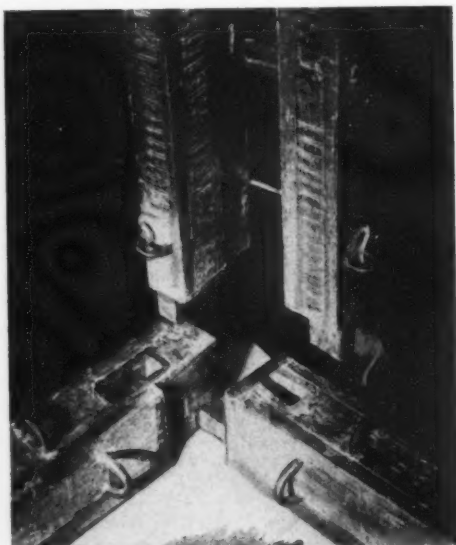
point the copper sockets and tenon-sheaths were fitted to the tenons and sockets cut in the wood and nailed to the wood with small copper tacks which passed through the underlying gold sheeting. The gold had of course been cut away around the tenons and socket-holes. The gold casing of the long beams and posts was composed in general of one single sheet, but in two cases there were two sheets overlapping at the edges. The long floor beam at the back had been covered with a thinner sheeting which appeared to have been pieced together, and was worn. The smaller hooks and staples were driven through the gold.

The ten tent-pole supports (columns) around the sides were of especially heavy gold. The shaft was a tube made by rolling a single sheet into cylindrical form and weld-

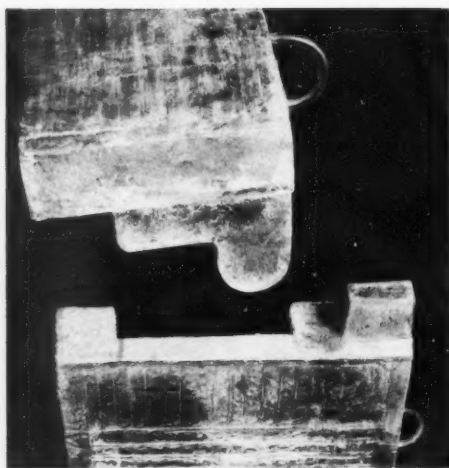


ROOFING POLE, COPPER CASED TENON, COPPER HOOK AND STAPLE. BOTH ENDS ON ALL POLES ARE ALIKE.

ing the edges together. The top was widened to fit the lower half of the bulb (capital). The top of the bulb is a separate sheet hammered to fit the top of the wooden bulb and nailed to the lower half with tiny gold tacks which pass through the overlapping edges of both



BACK RIGHT-HAND CORNER, LOWER END SHOWING COPPER CASED TENONS AND BEARING SURFACES AND COPPER SOCKETS. ALSO SCARAB-TIES.



FRONT RIGHT-HAND CORNER UPPER END FROM OUTSIDE SHOWING COPPER CASING OF END OF FRONT BEAM.

pieces and into the wood. The cylindrical part was usually split by the swelling of the wood when the moisture first entered the burial chamber.

The roofing poles were cased in the same way as the straight stems of the columns. One of these which had been cracked or



CANOPY. FRONT RIGHT-HAND CORNER, LOWER END, SHOWING COPPER CASED TENON OF JAMB AND COPPER SOCKET OF FLOOR-BEAM.

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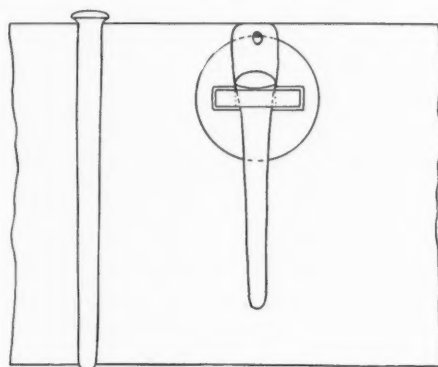
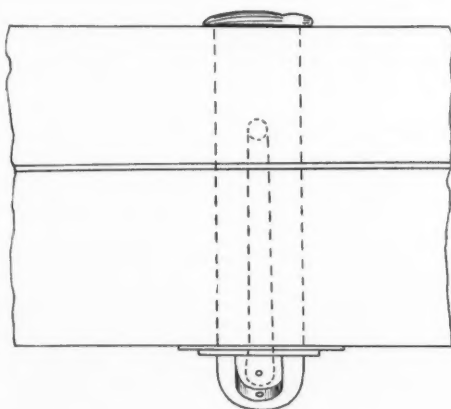
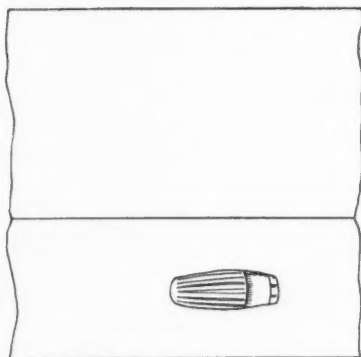
broken in two was repaired by slipping a tube of copper over the break and nailing it with small copper tacks to the wood on both sides of the crack or break. The gold sheet over the copper was thinner than usual so that the break probably occurred after the canopy had been completed.

The front roofing beam is composed of two pieces of wood,—a rectangular beam with an L-shaped section and a cylindrical bar underneath. These two pieces were joined together by flat wooden dowels and also by long copper staples. The upper edge of the two inscribed jambs which were cut to the section of the front roofing beam, had the edges of the inscribed strips protected with a heavy gold band, nailed with gold tacks to the jambs.

The two back corner posts were composed each of two upright beams completely covered with gold even on the surfaces which were fitted against each other. The two parts of each beam were fastened together by three slot-bolts of ingenious form. The end of each bolt, where it showed on the inside, was carved in the form of the long beetle known from the amulets of the Old Kingdom. The flat copper bolt had a long slot. In the inner post the end of the slot was held by a copper pin countersunk in the inner face of the beam. The bolt passed through both beams and protruded behind the back post. Here a heavy sloping copper pin with a large head was driven into the slot, drawing the two beams tightly together. The back face of the back post was protected by a copper disc (washer) which fitted over the protruding end of the slot-bolt.

On the backs of these two corner posts are three long staples in each, the purpose of which is obscure. Mr. Rice suggests that they may have been used for fastening the canopy to the wall of the room in which it stood.

When the burial chamber was first opened, the name of Sneferuw was read on a flat ob-



DIAGRAMMATIC DRAWING OF A SLOT-BOLT WITH HEAD OF BEETLE FORM.

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ject lying on the coffin beside the parts of the canopy. When this flat object was examined and removed in December 1926, it was found to be a wooden box incrustated with gold and pieces of faience. The box, which measured 159.5 cm. long by 23.5 cm. wide and 20 cm. high had been set on the western edge of the sarcophagus and had collapsed in place. The box had been empty and the wood was reduced to a coarse brown powder. This box had, inlaid in the gold sheeting which covered the top, the sides, and the two ends, the titles and names of Sneferuw. On each end was a seated figure of the king, inlaid as the rest of the box. The box was empty when it was placed in the secret tomb, but in the boxes along the wall was decayed linen of the fine quality required for the canopy curtains. It would thus appear that the canopy with its curtains had been set up in the original tomb at Dahshur and dismantled for transfer to Giza. The curtains, which were probably pulled down by the thieves, would have been gathered up with the other rubbish on the floor and placed in the boxes in which all this material was transported to Giza. But it is probable that the incrustated box was used to contain the curtains. It is too small to have held the bed mattress. The canopy and this

box were the only objects found in the tomb which bore the name of Sneferuw. On the other inscribed objects (the carrying-chair, the gold discs, and an inlaid board) the queen bears the title of "king's mother," which proves that these objects were presented by her son Cheops. Cheops' name was read only on the mud sealings with which the vessels and receptacles had been sealed, and in particular on the alabaster Canopic chest which still contained the water in which the wrapped packages of entrails had been preserved (3 per cent solution of natron.) The next work of reconstruction will be that of the curtain box. But there remain a number of inlaid boards of great interest to be restored to their original form.

We have not been able to obtain an expert opinion on the nature of the wood used in the canopy, but it was probably cedar of Lebanon. It is recorded on the Palermo Stone under the year X+2 that Sneferuw brought forty shiploads of cedar to Egypt. The next year he built a hundred-ell ship of cedar and the year after that he made cedar doors for his palace. It may well be that the frame of our canopy was constructed of cedar from these same forty shiploads mentioned in the Palermo Stone.



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NOTES AND COMMENTS

PRACTICAL HELP

The completion by the Architectural Division of the Emergency Planning and Research Bureau of Boston, of measured drawings of several old houses, and period rooms in the Boston Museum of Fine Arts indicates the constructive results issuing from the Bureau project. Although the Bureau's first purpose has been to relieve the unemployment situation among the architects of Boston, the work undertaken is of importance to architects and designers since the drawings will be published and made available to the profession.

The usual pressure which sometimes results in inaccurate work, has been absent in this case, and the draughtsmen have given unsparingly of their time to make the drawings conform in every way to the original, even to the accidental variations in detail. Nine rooms in the Museum are to be measured, several of which are partially completed. Especially exacting has been the Tudor room, which includes a variety of panelling, all authentic examples of XVth century English work. During the summer the draughtsmen have worked exclusively on the exterior of houses and on those places which may not be available for recording in winter. The work in the Museum will then be resumed.

In thus providing somewhat for the material needs of the unemployed draughtsmen, the Bureau has been able to undertake a project which has long been dreamed of but which has not been possible to finance under the usual conditions prevailing in architects' offices. No national fund for such work exists in this country, as in some countries abroad. Already many drawings of fine old buildings around Boston have been made, which hitherto had no record whatsoever, including the old State House on State Street. The number of architects who have been employed by the Bureau reached 137 last spring, but lack of funds has reduced it to 57 at present.

MASTERPIECES FOR CHICAGO

The World's Fair Committee of the Art Institute of Chicago is planning to gather in the Art Institute building, which has been designated the official Art Palace of the Century of Progress, one of the greatest and most valuable collections of masterpieces the world has ever seen. The Committee is composed of Charles H. Worcester, Percy B. Eckhart, John A. Holabird, Max Epstein and Chauncey McCormick.

A ROMAN STATUE OF THE AUGUSTAN AGE AT MINNEAPOLIS

During the summer months the Minneapolis Institute of Arts has acquired an extremely important Roman statue of Agrippina "the Younger", dating from the Augustan Age, a period during which the artistic development of Rome reached its noblest expression. Up to the last years of the Republic, Roman sculpture had been largely confined to copying or imitating Greek pieces, but toward 40 B. C., a new and entirely native genius, the art of portraiture in stone, began to express itself. These portraits have probably never been surpassed.

The sculpture of this first Imperial Roman age—28 B. C. to 69 A. D.—is characterized by a clarity of conception combined with a beauty of execution that is both harmonious and virile. In the succeeding Flavian dynasty, portrait sculpture reveals a realism of a somewhat brutal type, quite justified, however, in its subject models. By the middle of the third century the decline that marked Roman life and government is clearly reflected in its art.

The museum's statue of Agrippina was found in Pompeii. Early in the nineteenth century, Murat, appointed King of Naples by Napoleon, sent it to France as a present to one of his friends, and it remained in that country until a year or so ago. Purchased through the Dunwoody Fund, it is now on view in the Classical Gallery.

The figure is full-length and three-quarters life-sized. Agrippina was born in the year 16 of our era, at a Roman settlement on the Rhine, later called, in her honor, Colonia Agrippinae—the modern Cologne. She was the daughter of Germanicus and of Agrippina "the Elder", and a sister of the Emperor Caligula. It has been not merely difficult, but apparently impossible, to discover in her any desirable—or even negative!—traits of character. Her entire life seems to have been spent in intrigue and perfidy.



A ROMAN STATUE OF AGRIPPINA "THE YOUNGER",
MOTHER OF NERO.



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THE NEW CITY HALL OF ARRAS, FRANCE, WILL DEPICT ITS PAST IN MURAL PAINTINGS, THE WORK OF CHARLES HOFFBAUER.



SOPH

Announced the death of Heinrich Schliemann, the excavator of the Trojan coveries. Dr. Schliemann from each of his expeditions a Greek vase, years of his life to his scholarship, honeycomb home, man hater of divinity.

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ART AND ARCHAEOLOGY

NEKPIKOZ

SOPHIA ENGASTROMENAS SCHLIEMANN

Announcement has come from Athens, Greece, of the death there October 27 of Mme Schliemann, widow of Heinrich Schliemann, the German archaeologist and excavator of Troy, Mycenae and Tiryns, whose discoveries opened a new world of Aegean civilization. Dr. Schliemann, for whom the stories of Homer had from early boyhood exercised a magic glamor and inspired the quest of Troy, came to Athens in search of a Greek bride. Sophia Engastromenas, seventeen years old, pretty and able to recite passages of Homer to his content, became the wife of the wealthy German scholar, who was thirty years her senior. On their honeymoon, Dr. Schliemann is said to have written home, "Sophia is a splendid wife who could make any man happy, for like all Greek women, she has a kind of divine reverence for her husband".

In addition to her personal charm, she was even more endowed with natural gifts than her husband. Her life will have a noteworthy place in the history of Greek women.

Together, Dr. Schliemann and his wife shared the experiences and hardships incident to excavation in those early days in Greece. The intelligent and resourceful young woman took charge of a gang of workmen and supervised their work day after day. After periods of searching, hoping, despairing, came the discovery of the second city on the site of Troy, and the finding of the golden treasure. Even when later, Schliemann laid bare the famous royal treasure at Mycenae, he was not so happy as in those moments when he bedecked the brow of his Greek wife with what he called the "jewels of Helen" and gazed upon her, speechless with emotion over his dream come true.

After the discoveries and publications came wide recognition and the friendliness of Gladstone. On one occasion in London, when diplomas were presented to both Dr. and Mme Schliemann by the Archaeological Institute, her husband gave an address, and then she spoke in English. Life went on graciously in their marble "Palace of Ilium" in Athens where they entertained kings and the great of the scientific world. It was after Dr. Schliemann's death, that the writer was privileged to experience Mme. Schliemann's hospitality in this wonderful residence into which had gone the dreams of a life time. It has now been acquired by the Greek Government.

It must have been with a stirring of old memories that Mme. Schliemann noted this past summer the renewed excavations at Troy under the auspices of the University of Cincinnati, with Prof. Carl Blegen as director and the veteran Dr. Dörpfeld an advisor.

CAROLINE BENEDICT CARROLL.

DOCTOR IOANNES GENNADIUS

Every lover of the classics and admirer of Greece will learn with profound regret of the death on September 7, after a lingering illness of more than a year, of Dr. Ioannes Gennadius at his home in Molesworth, Surrey, England.

After a long and distinguished career in the diplomatic service of his country, Dr. Gennadius crowned the fruitfulness of his full years by his gift of his magnificent library to the American School of Classical Studies at Athens. The splendid Naxian marble structure of the Gennadeion, as the Library is called, stands today as the adequate setting for his tribute to

his equally distinguished father, George Gennadius. The Library is more than a collection of rare books and fine bindings by the foremost masters of the art. It is the focus of all intellectual effort at further interpretation of Greece and of Hellenism. In this princely gift to the scholarly world, the Archaeological Society of Washington, in the person of its first Director and Secretary, the late Dr. Mitchell Carroll, played a decisive part, as Dr. Gennadius himself acknowledged in a letter written in Washington April 27, 1922.

Born in Athens and educated at the university there, which later honored him with a doctorate, Ioannes Gennadius early entered the Greek Diplomatic Corps and served with distinction in many European capitals as well as in Washington. Always an ardent student of the history of his country, Dr. Gennadius fortunately had the personal means to collect the magnificent library which now constitutes the great treasure of the American School of Classical Studies at Athens. By the terms of the deed of gift, the Library is to be open under proper restrictions to scholars of all nationalities. Articles describing the collection itself, the building, and some of the rare bindings are to be found in *ART AND ARCHAEOLOGY*: Vols. XIII, pp. 199-208 (May, 1922), and XVII, pp. 147-152; 177-188; 195 (April, 1924).

While serving in London as Minister of Greece in 1909, Dr. Gennadius married the daughter of a prominent English family and is survived by her. For several years past the family has resided in Surrey, not far from London.

THE RUINED GAINSBOROUGH

The so-called ruined Gainsborough, well known alike to European and American students of English painting, has recently been restored to a semblance of its original condition through cleaning. Since 1911 it has belonged to the Museum of Fine Arts, Boston, but in recent years has not been on exhibition. At the present time, however, under its new title, *A Blind Man Crossing a Bridge*, it has been hung in the large painting gallery of the Museum.

It is not to be wondered at that it was styled the "ruined Gainsborough" for the color was obscured by a layer of thick brown oil. By expert cleaning this surface layer of pigment was removed, revealing in all its fresh beauty a delightful landscape scene. It is a view in all probability of Gainsborough's native Suffolk which he loved to paint. The trees, growing by the side of the brook, the cool blue sky, and the silvery distance have an intimate and airy charm. In the center of the picture a dog is leading his blind master across a rustic bridge—not a recognizable landscape, but a synthesis of familiar motifs.

A NEW WHISTLER IN BOSTON

There is an extraordinary appeal to the imagination in the discovery of an hitherto unknown work of art, and particularly so, when close upon the heels of the discovery, an unusual circumstance leads to the spectacular revelation of the identity of both subject and artist. Such was the discovery a few months ago in London of Whistler's portrait of Alma Stanley, a famous and beautiful actress and friend of King Edward VII. This portrait was purchased recently by the Boston Museum of Fine Arts, and will soon be placed on public exhibition.

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When the collection of a wealthy and eccentric dealer was sold in London, among the pictures was a life size pastel drawing of a strikingly handsome woman. This portrait had never been exhibited, and both subject and artist were unknown. It was bought by an antique dealer, in whose shop it was seen by an old friend of Miss Alma Stanley, the famous actress of the nineties. A successful effort was made to find Miss Stanley, who visited the dealer's shop and identified the picture as a portrait of herself painted by Whistler thirty-five years ago.

The portrait is a full-length life-size pastel in tones of black, grey and purple. The actress, standing against a simple background, gazes at the spectator with an expression of infinite sadness. Her black dress is relieved by a note of deep purple in the flower on her shoulder, but aside from this one detail, no elaboration of background or costume detracts from the sensitive rendering of the features, upon which the artist has concentrated all his talent. The slender face and figure are imbued with that grace and elegance, so characteristic of Whistler. It is unusual to find such a large pastel, which does not give the impression of a simple *tour de force*, and in which the artist is not restricted by his medium. Whistler's experiments were entirely successful in pastel, a medium which suits his peculiar genius—his light but deft touch. One feels upon seeing this portrait with its sensitive artistic expression and amazing technique, that he has immediately entered upon a more intimate acquaintanceship with the artist. The appeal to the imagination in the subject of this portrait is not the least of its charms.

HOW WOULD YOU MAKE A MUSEUM EFFECTIVE?

Branding the nation's art museums as "department stores of art", Lee Simonson, artist and scenic designer, emphasized in a recent issue of *The Architectural Forum* the need for more showmanship in selling appreciation of art to the public. He mocked the tendency shown by curators and directors to crowd their museums with meaningless arrays.

"Our museums," he continued, "remain ineffective very largely because the arrangement of their collections inevitably dulls the interest they are supposed to arouse. Everything is shown; nothing is displayed. The art museum, which might emotionally be as exciting as a great drama, well directed, becomes nothing more than a huge dictionary of art.

"Museums are encouraged to evade their responsibility to the public by the trend of education which makes it everybody's duty to appreciate art. We are so impressed by the amount of art of former epochs that has been unearthed or preserved that we expect high school students or the average man or woman to appreciate more kinds and forms of art than a connoisseur of Imperial Rome or a Renaissance patron of Buonarrotti or Botticelli ever knew. Every year more 'treasures' are added. The problem of assimilating even a fraction of what he so fitfully stares at would not be so impossible for the museum visitor if the museums limited their displays to the traditional forms of the fine arts—painting and sculpture.

"They have become depositories of every kind and variety of 'applied' art until they are a monumental medley of paintings and pottery, furniture and firearms, monuments and miniatures, rings and rugs, cameos and ceramics. In most cases the museum visitor

might get exactly the same kind of visual experience walking through the department of parlor ornaments and bric-a-brac at the local department store as through the galleries of an art museum. Indeed, American museums have become the department stores of art.

"Having displayed a plethora of material arranged with encyclopedic repetitiousness and monotony, having destroyed any effective indication of the unity binding together the art forms of any epoch, which made them a milieu where the values of living were enhanced, our museums proceeded to set up the huge apparatus of an educational department, wave free pamphlets at the visitor or offer him free lectures. All this in order to tell him what he is supposed to have seen, most of which he could have seen and discovered for himself with elation and excitement if the museum had given him half a chance. In a well-designed art museum an educational department would be superfluous. A visit to a museum, built and arranged not to present its accumulations in imposing array but to reveal their meaning, would be an education in itself."

Whatever we may think of our museums, it must be admitted that "museum fatigue" is perfectly well known. Whether the ideal museum would not inflict it upon its visitors is debatable. But Mr. Simonson is not quite fair in his sweeping condemnation. He scolds the Metropolitan in New York and does not mention its calm, beautiful period rooms which are not overcrowded, or mere meaningless groupings of objects, but which do "reveal their meaning" perfectly. There is much room for improvement in all museums, truly. But we must be balanced in our judgments. "Of nothing too much" is a sound rule. We can all afford to think a little about the best way of improving our museums, and giving them their fullest aesthetic and educational values.

SHORT NOTES

Six Stone Age huts have been recently excavated at Skara Brae in the Orkney Islands, north of the Scottish coast. One hut was practically intact and contained the prehistoric family's tools and implements of flint and stone. Beads, pendants, fragments of pottery and ornamented moldings have also been found. V. Gordon Childe, the noted British archaeologist and prehistorian, is in charge, and an article in the *New York American* states that he considers the finds so important that only at Pompeii can houses be found equally well preserved in detail.

More than 20,000 objects have been excavated from the site of the ancient city of Tan, Shantung Province, China, says special correspondence to the *New York Times*. Fragments of a curious, finely glazed black pottery dating back to the first millennium B. C., and beautifully ornamented bronze vases and receptacles; engraved tortoise shell covered with historical records; animal bones similarly carved, and other objects give considerable light upon the history and culture of China in this region almost thirty centuries ago.

What is believed to have been the burial grounds of the Aztec King Netzahualcoyotl were discovered recently by a road battalion of Mexican troops working on the highway between Mexico City and Texcoco. As the fragmentary remains of Netzahualcoyotl's palace stand only a few yards distant, the skeletal material and war implements are attributed to him.

BOOK CRITIQUES

Early Muslim Architecture: Umayyads, Early 'Abbasids and Tulunids. By K. A. C. Creswell, F. S. A., Hon. A. R. I. B. A. Part I *Umayyads, A. D. 622-750, with a contribution on the Mosaics of the Dome of the Rock and of the Great Mosque of Damascus by Marguerite Van Berchem.* Pp. xxv; 414. 419 illustrations in the text and 81 colotype plates. Oxford University Press, New York. 1932. \$100.

This long awaited book of Colonel Creswell is the most important recent work on Muslim architecture. The illustrations alone would suffice to give it a preeminence in the literature, for they include excellent drawings and photographs of buildings, details, and mosaics, reproduced here for the first time. The volume deals with a series of early constructions concerning which we have hitherto had the scantiest information, inadequate photographs and measurements, and conflicting opinions. By a careful systematic study of the buildings themselves and all available texts pertaining to them, Colonel Creswell has finally established a solid base for any future interpretation. He has applied to the analysis and reconstruction of the monuments the scruples and minute observation of the classical archaeologists; there is very little that is accepted or asserted in this volume on authority or tradition. From this exactness in description and inference there results a much completer and more orderly knowledge of a whole body of important buildings. In several instances the author has come to satisfactory conclusions about the date and stages of construction of crucial monuments which have up till now been matters of hopeless dispute. He has shown beyond doubt that the great mosque of Damascus (excepting the obvious classical remains in the south wall) is an Umayyad creation; that the Dome of the Rock is no reemployed Byzantine church, but a fairly homogeneous work of c. 692; and finally that the Mahatta palace, over which so much has been written in vain, is an Umayyad palace of the VIIIth century.

The contributions of Colonel Creswell are not limited to the fresh monographic descriptions and historical attribution of monuments. He has also included a rich series of minor monographs on specific elements of architecture: on the development of the horseshoe

and the pointed arch, the minaret, the pendentive and various types of plan and vaulting. In almost every case he has arrived at conclusions valuable also for the study of early Christian and mediaeval architecture. By tabulating in a chronological and typological series the various examples of a given element he has been able to formulate the history of its development and diffusion in a far clearer fashion than previous writers.

But this very reliance on purely analytic, statistical methods is responsible for one serious defect of this solid volume. Colonel Creswell imagines that a building is simply the sum of certain easily isolated elements—walls, piers, vaults and the applied decoration—and that it has been adequately described when its parts have been correctly enumerated and measured. But the building as an architectural, aesthetic object is constituted also by its formal relations, by the character of the whole, the qualities of its massing, silhouettes, spaces, surfaces, internal ordering and rhythms; and no description can be considered adequate which fails to indicate a necessity in the character of the parts with respect to the perceptible quality of the whole. It cannot be urged that the purpose of the book is archaeological and hence excludes such formulations, since the author's concern with a purely analytic classification of the parts reflects an attitude toward architecture and assumptions concerning its nature which do actually affect his archaeological conclusions. For only from such a viewpoint could one compute as Creswell does—more than once in this volume—that a given building is 55% Syrian, 22% Roman and 22% Byzantine, on the basis of a tabulation of the frequency of the elements of the building in these various styles. This method is not only bad in its crudity of analysis, but is illogically applied, for it is inferred that a given element is Roman on the strength of a single Roman parallel. Yet Creswell could say of the building in question, despite the "computed" majority of Syrian elements, that it "is a thoroughly Byzantine building with Byzantine mosaic decoration" (p. 94). By a similar method he is led to the unjustified conclusion that the decoration of the facade of Mahatta is the work of Coptic artisans because he has found two of its themes in late Coptic art, but no-

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where else. The mouldings of the same sculptured surfaces he attributes, however, to the art of northwestern Mesopotamia.

Despite the immense erudition of the author and his personal and devoted inspection of every building in question, he has not succeeded in formulating a valid general proposition concerning the aesthetic characters of the monuments. On the contrary, his hard-headed, empirical, archaeological method has evaporated into a rarefied mystical doctrine when he has undertaken to speak of the "beauty" of a building. Thus after having confirmed by admirable scruple in measurement the simple geometrical layout of the Dome of the Rock, and after having shown that this method of layout is typical of Syrian buildings and could even help us today in restoring Syrian churches which survive in apparently undecipherable ruin, he concludes that this geometrical layout of the *plan* is the cause of the "beauty" of the Dome of the Rock and accounts for the harmony we experience within its interior. But our impression of the whole proceeds from the spatial form and from the interior and exterior elevations, which have quite other proportions than the plan; and even from the light and color, which are not susceptible to measurement. According to Colonel Creswell "every part of this building is related to every part in some definite proportion . . . Some of the ratios involved, such as the square root of two, and especially that which the diameter of a circle bears to its circumference, which enters into equation of movement of everything in space, nay, further, into the equation of movement of the very electrons of the atom itself, are *fundamentals in time and space* 'Creswell's italics'; they go right down to the very basis of our own nature . . ." etc. It should have struck the author that these two ratios do not express *definite* proportions, but that they are irrational numbers, and thus immeasurable. The fact that they appear in some physical equations is no more a guarantee that they are the source of the aesthetic effect of a building than the presence of oxygen in earth, air, fire and water confirms the aesthetic importance of this element in the bricks of a building.

MEYER SCHAPIRO.

A Pilgrim Artist in Palestine. By Peter F. Anson. Pp. 165. 39 illustrations. E. P. Dutton and Co., New York. 1932. \$2.50.

The author's brief foreword makes it evident that he means this to be considered as a

picture-book. The reviewer agrees. There is, to be sure, text enough, but the pictures make the book. They are line drawings, all in black and white, mostly in a rich, strong line without light and shade; topographical and architectural drawings often rather like a relief-map in effect showing the contours of the hillslopes, the modeling of the land.

The artist displays a sound perspective and a satisfactory realization of architectural values in such matters as, for instance, a careful statement of the stone-jointing in his buildings.

These drawings seem to have been done in a restrained mood which holds them rather to the austere factuality, perhaps as proper to their purpose of simply showing the present-day aspect of places where once, long ago, the Lord Christ passed. And here is significance of the unaided line. But now and then the artist lets himself go in strong effects of the blacks used in broad masses to stress the sharp contrast of the color values in certain scenes. It is a well-made book. There are thirty-nine full-page drawings, and they are all, where they should be, on the right-hand pages! Opposite is found about a half-page of print in which the author, with admirable terseness, cites the texts and traditions about the place, and its sacred associations so poignant, for instance, in the fourteen stations of the Via Crucis—The Way of the Cross. There is no printing on the back of the drawings, and as there is only the title of the next picture on the next page, there is a plentitude of blank paper and a pleasing sense of space and ease. Finally, the linen binding is as unpretentious and right as is the matter within.

A. BURNLEY BIBB.

Excavations at Olynthus, Part III: The Coins Found at Olynthus in 1928. By David M. Robinson. Pp. xiv; 129. Plates 28. Johns Hopkins Press, Baltimore. 1931. \$10.

Excavations at Olynthus, Part IV: The Terracottas of Olynthus Found in 1928. By David M. Robinson. Pp. xii; 105. Plates, 62. Johns Hopkins Press, Baltimore. 1931. \$10.

The Olynthian coins, labelled, cleaned, catalogued and separately published, furnish one more proof of the careful and scientific way in which excavations were conducted at Olynthus. In all, 1,187 coins were found in the first campaign, 85 silver and 1,102 bronze, belonging to forty-three different cities. Many of them are rare, while some belong to five new types. The thorough description of the various groups in which the coins are divided, accord-

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ing to material and provenience, is followed by an exhaustive discussion of their dates, of their artistic value, and of the historical information which they furnish. Thus the conclusions obtained are well documented and teach that the site excavated by Professor Robinson is that of Olynthus, that it was one of the most important commercial and artistic centers of the Chalcidice in the fifth and fourth centuries, and that the city was not inhabited after its destruction by Philip in 348 B. C. The twenty-eight plates illustrate admirably the coins described in the text. The reproduction of photographs of the coins themselves is especially to be commended, although details in some of the smaller coins would have been clearer in photographs made from casts.

The terra-cottas discovered at Olynthus in the first campaign are masterfully described and discussed in volume IV. Their artistic qualities and their technical peculiarities are pointed out, their similarities with other known examples are indicated, and their dates are most successfully established. Most important among them are a female bust, a plaque on which the Athena Parthenos of Phidias is represented in low relief, a mould of Cybele, some realistic and comical figures, and a series of nude and semi-nude female representations. In date they range from the early sixth century to 348 B. C. The stratigraphical evidence, the exhaustive study of the specimens, and the known date of the destruction of Olynthus enabled Professor Robinson to prove that nude and semi-nude female figures were modeled before 348 B. C., that the Neo-Attic treatment of the drapery was not unknown to the early fourth century artists, that the busts which were considered to be invented in Graeco-Roman times originated possibly in the fifth century, and that realistic and comical figures were common at Olynthus before the Hellenistic period. He has further proved that terra-cottas were not only used as *klerismata* in the graves, but also as ornaments in the houses of the living.

Scholars will feel grateful to Professor Robinson for his full and systematic publication of the Olynthian smaller finds. Usually such articles are neglected in large excavations. His two books form models of scientific presentation of archaeological finds; their scholarly discussions and exhaustive bibliographies make them indispensable not only to the numismatist and the general archaeologist, but also to the historian and to the classical student.

GEORGE E. MYLONAS.

Dynamarhythmic Design. By Edward B. Edwards. Pp. xx; 122. Many figures in text, and 28 plates. The Century Company, New York. 1932. \$3.50.

The harmonio-dynamic decorative designs of Mr. Edwards, just published, open a new vista to decorative art as unexpected as it is meritorious. They impress me as visualized poems rising in rhythmic cadences and sinking with rhyming repose, only to spring anew to life with ever increasing grace and majesty. Art is in these design themes of harmony and order, but nevertheless swelling with fantasy and geniality in the manner of the best given us by the Greeks. These lines, dots and areas are their own reason for existence, so posed, arranged and proportioned that even the slightest displacement would be noticeable and apt to scatter, so to say, the art molecules of which they are the integral units. As illustrational themes each type appeals to us as a euphonious language in which the grammar has reached its ultimate perfection and in which the musical sounds of the pronunciation exclude even the possibility of dialects and brogues. They visualize the classic thought and aim, but now advanced to a hitherto unbelievable height, stateliness and grace. The dynamic symmetry which underlies their forms makes them stable and balanced as well as harmonious as a whole and concordant in details, virtues rarely found in modern art. They sparkle with life and geniality and repeat themselves in untiring combinations, charming by their movement and amazing by their simplicity.

Behind this beauty and repose lies the inexorable harmony of the dynamic proportions as a guide without which they could not have been born. In some of the themes we seem to perceive a glimpse of the origin of the early Arabic art, as it has come down to us in wall decorations, wall tiles and book decorations. As in the Arabic art the decorative lines seem to dart out into space only to return abruptly, join and resume their dash, again combining in wonderful, and often perplexing, forms which fade away or spring into life and view according to the viewer's position and attention.

Those among modernists who have purposely disavowed the dynamic system of symmetry as a mere chain and shackles upon their artistic flights in search of new forms, or as a hindrance to a soaring genius, will here find and, we hope, realize, that sanity and beauty

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are the best guides in art as well as in all other human endeavors. To one who knows the underlying principle of these decorative themes—and all who wish can learn it from Edwards' lucid explanations—it becomes evident that the scope for this art is unlimited, and that we here enter a new artistic era in design, which will have inherent strength to resist degeneration through the rules of fashion and the constant craze for something new, "unhampered by harmony and law".

GUSTAVUS A. EISEN.

Sappho of Lesbos: Her Life and Times. By Arthur Weigall, late Inspector-General of Antiquities, Egyptian Government. Pp. xii; 328. With 13 reproductions from sketches and photographs. Frederick A. Stokes Company, New York. 1932. \$3.

A new, and attractive, book on Sappho, especially if published in America, inevitably leads to a comparison with Professor David M. Robinson's *Sappho and Her Influence*, published in Boston in 1924, with which may be coupled Miller and Robinson's *The Songs of Sappho*, published in New York the same year. Mr. Weigall refers to Lobel's book on Sappho (1925), and to the 1928 revision of Edmonds' *Lyra Graeca*, but he betrays no acquaintance with Robinson's scholarly and sympathetic treatment of the Lesbian poetess. This is the more regrettable, because the two writers supplement each other admirably in the presentation of the same theme.

Mr. Weigall, to be sure, has enlarged the subject, for he handles not Sappho alone, but her times as well. This is why he devotes several chapters to Periander of Corinth, Athens and the Rise of Solon, Sparta, Lydia, the Ionian Confederacy, and the Greeks in Egypt, so that we sometimes do wonder whether the author, as he himself suggests, has not "wandered too far from his main subject".

Not that he is not always interesting and informative, but one rises from a perusal of the book feeling that Sappho herself has fared none too well at the writer's hand. She seems to figure overmuch as a representative of "the sex-life of that age", and it is hard to believe that the supreme poetess, the "tenth muse", who bitterly reproached her brother for "a vagrant love", herself "had no morals", and "would not have recognized any ethical

distinction" between what we call morality and immorality. Mr. Weigall actually accepts as true the late story of Sappho's love for Phaon, though most scholars, I believe, would agree with Professor Robinson that it is "patently mythological", for the ferryman Phaon, who is never mentioned in Sappho's fragments, "is only another atav of Adonis", the beloved of Venus, or Aphrodite, who once, disguised as an old woman, had given him a magic, love-compelling, ointment. Such a tale should be treated as a myth. It does not belong to sober history.

And yet the abundance of historical material is after all the best feature of Mr. Weigall's entertaining and readable book.

H. RUSHTON FAIRCLOUGH.

The Foundations of Bible History: Joshua and Judges. By John Garstang. Pp. xxiv; 423. 73 Plates; 19 Maps. Richard R. Smith, Inc., New York. 1931. \$5.

The author is well known for his field work in archaeology. He was from 1920 to 1927 director of antiquities in the Palestine government, and now is professor of archaeology in the University of Liverpool. The present volume maintains the high quality of the work previously done by him in *Land of the Hittites* and *Hittite Empire*. The book discusses the historical background, campaigns led by Joshua, settlement of the tribes, and the tribes under the judges. An appendix describes places and archaeology. The author has visited every identified site mentioned in the oldest sources of Joshua and Judges. Three localities—Jericho, Ai and Hazor—were examined more thoroughly with the spade. The topography and archaeology of the Biblical material were found to agree remarkably well with the findings on the several sites. The volume makes very vivid this early period of Israel's history, and is a valuable contribution to Biblical knowledge. We may call it a topographical and archaeological commentary on Joshua and Judges. The plates and maps are exceptionally good, and throw much light on the text. The volume is admirably gotten up. The paper, type and binding reflect great credit on the publishers.

GEORGE S. DUNCAN.

ART AND ARCHAEOLOGY

Child Life in Greek Art. By Anita Klein. Preface by Clarence H. Young. Pp. xix; 62. Plates xl. Columbia University Press, New York. 1932. \$3.50.

Ancient treatises on education discussed the training of the child from the cradle to his entrance into professional life. In the present work Miss Klein has traced the development of the Greek child from birth to maturity or in less fortunate cases to his premature grave. She has collected her evidence from all available minor works of purely Greek art and from the ancient objects for the use of children, found in the principal museums of Europe and America. The comparatively few larger and better known works of Greek art depicting children are naturally included. The study is, however, limited to a consideration of purely Greek works, disregarding the Greco-Roman finds from Pompeii and elsewhere.

The author has most successfully accomplished the difficult task of collecting her material. The reader feels that every sentence represents hours—perhaps days—of careful research, and that the data presented can be relied upon. The book is interesting because of its subject matter, but no attempt is made at literary style.

Miss Klein's work reveals that though conditions have changed in many ways in the past two thousand years, the human child is essentially the same. For instance, the Greek infant's favorite position for falling asleep was that by which colic is relieved (p. 7). The "Yo-yo" (though Miss Klein does not call it that) delighted the European child before the Philippines were known (p. 21).

The illustrations in the plates of the book will delight not only adults, but also any child old enough to be interested in pictures.

There are occasional references to modern parallels, but in general the author has presented rather than interpreted the material. She has assembled a vast store of information which will be of use to students in various fields. One can imagine, for example, how a study of this kind may well shake the favorite theories of those who maintain that the Greek civilization fell because it paid too little attention to the young, as well as of those who hold that the present day fails to reach intellectual heights because of over-emphasis on the child.

ERNESTINE F. LEON.

Sculptured Portraits of Greek Statesmen. By Elmer G. Suhr. Pp. xxi; 189. 23 full page plates. Johns Hopkins Press, Baltimore. 1931. \$4.50.

This study treats of the Greek statesmen from the earliest times to the end of the Hellenistic period, and devotes a special section to Alexander the Great. It contains twenty-three illustrative plates and a good bibliography, but no index. It will be useful for the material it brings together and as a convenient reference for classes engaged in the study of Greek sculpture. But it is difficult to see where Dr. Suhr has made any distinctive contribution either in interpretation or identification. His style, too, is rather lumbering, and he is laboring with the English idiom on nearly every page. The illustrations are very good, although the Azara herm, being so important for a considerable part of the discussion, might well have received a full-plate reproduction. I also miss a reference to Geneva Misener, "Iconistic Portraits," in *Classical Philology*, XIX (1924), pp. 97-123. But these are minor criticisms, and the book will be found useful to the student who wishes to read a convenient summary of the critical opinion centering about these Greek portraits, and to have before him in small compass reproductions of the more important ones.

E. L. HIGHBARGER.

Through Basque to Minoan. Transliterations and Translations of the Minoan Tablets. By F. G. Gordon. Pp. ii; 83. University Press, Oxford. 1931. \$3.75.

Both Minoan and Basque are "non-Aryan" languages, so the author tried the experiment of assigning Basque values to Minoan characters. Nine Minoan documents are translated. Among them is the Phaistos Disk, which is generally considered to be non-Minoan, but which is here said to have the "archaic Cretan" hieroglyphs; it is "a metrical calendar, covering the whole year, with . . . the principal deities . . . governing the events of it". Incidentally, the Minoans are credited with a considerable knowledge about constellations. A list of signs and their values conclude this work.

The results are not unreasonable, says the author. "Not only did the system yield a language indistinguishable (at present) from

ART AND ARCHAEOLOGY

Basque, but it revealed unmistakable references to Hellenic deities, several old Greek names, and three poems, one in hexameter verse, one in elegiac, and one . . . closely resembling the metre of the XIIth Epode of Horace."

To the reviewer—who, however, is not a philologist—the equations and translations seem more ingenious than convincing; for example, *Adziaqiadzua* is Eupalamides, i. e., Ikaros the grandson of Eupalamos.

However, aside from the probability or possibility of the transliterations and translations, the idea of associating Basque and Minoan may prove worth while. The Etruscans, and perhaps Sardinians, came from the eastern Mediterranean, and any study in this direction, however unconvincing or fantastic it may seem, is not to be discouraged. So, what-

ever one may think of this "noble experiment", Mr. Gordon has done a service in bringing our attention to Basque and the possibility, at least, of its connection with Minoan.

J. PENROSE HARLAND.

Digging Up the Past. By C. Leonard Woolley. Pp. ix; 138. 31 illus. Charles Scribner's Sons, New York 1931. \$2.

The author has had a long experience uncovering ancient sites in southern Babylonia. Most persons know something about the finds brought to light. Few are acquainted with the methods of digging. This book gives an accurate account of excavations from start to finish which those interested in archaeology will wish to know. The volume is well illustrated.

GEORGE S. DUNCAN.

THE SUMERIAN EDITION OF THE EPIC OF GILGAMISH

(Concluded from page 296)

in the Philadelphia collection*, of which Professor Chiera found a small duplicate in Constantinople†. The Nippur collection certainly possessed an edition of the Epic on two-column tablets, as is proved by a fragment, too small to be identified at that time. It was published in 1914 by Professor Poebel.‡

In 1913 Professor Zimmern published the lower half of a two-column tablet§ which clearly belongs to the same standard edition of the Sumerian Epic as finally edited before the great Accadian edition and translation in the XXth century B. C. I have now been able to decipher this Berlin tablet. It is clearly Book or tablet *One* of the final edition and precedes the Kish tablet in order of the series.

Other Sumerian tablets of the same period prove that there was also a long Sumerian epic or poem concerning Gilgamish and the fabulous monster Zû, and another epic concerning the father of Gilgamish, Lugalbanda, and the same Zû. Some of these have been erroneously assigned to the Gilgamish Epic.

The Kish tablet and all other known fragments of the Gilgamish Epic belong to the period of Hammurabi, or a little earlier. To inaugurate the long task of establishing the text of the old and original Sumerian epic I shall edit the entire group in the October number of the *Journal of The Royal Asiatic Society*. This new subject, suddenly brought into being by the Oxford-Field Museum Expedition, is likely to be long and fated to many disappointments unless excavations quickly solve the problem at Kish, Nippur and elsewhere. It would be a disaster to the progress of learning if both of these great sites remain unfinished at least in essential parts.

* *Publications of the Babylonian Section, Vol. X, part 2, No. 5.*

† Ed. Chiera, *Sumerian Religious Texts. Crozer Theological Seminary, Babylonian Publications, Vol. I (1924). No. 38.*

‡ *Publications of the Babylonian Section, V, No. 27.* (No list of Museum numbers.)

§ *Sumerische Kullieder, No. 196.*

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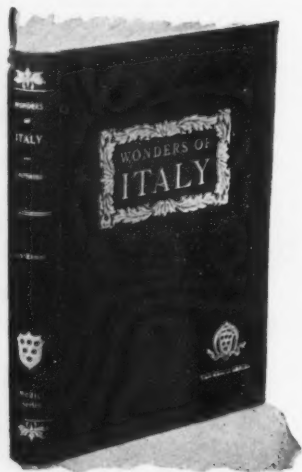
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